THE PRESERVATION AND REUSE OF URBAN CHURCHES AS A CONTRIBUTION TO THE URBAN LANDSCAPE

by

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ABSTRACT

Through massing, scale, craftsmanship, and their traditional role, church buildings are valuable to the city. They play an important role in the cognitive and formal ordering of the city. They are important to the temporal contect of the city. As the site of milestone events in many people's lives, or as symbols of these events in others' lives, church buildings are important for the collective memory. The grand scale of the church space combined with careful small scale detailing, make it a place with qualities that are rare in the daily life of most people.

Because of their importance to the city opportunities and methods to reuse church buildings should be found if the buildings are abandoned by their congregations. Uses should be found that are sympathetic to the spirit and the form of the building. The forms in church architecture are powerful enough that they can survive extensive, yet sensitive, new construction to accomodate a new use and allow the place to read as a new building that was once a church.

In order to allow the building to provide a temporal context to the present, when the building is given a new use it must also be given a new image. The elements of the image of a church must be analyzed to discover those which are the most powerful and how they may be changed to allow revealing juxtapositions that say, "this building was a church but is one no longer." In changing the image of the church building, care must be taken not to destroy those qualities which made attempting its reuse worthwhile.

These issues are investigated in a series of case studies of reused churches. Several new issues in the redesign of church buildings were discovered through the case studies. The result is a set of observations and conclusions that are a synthesis of the real and the ideal.

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CHAPTER 1
ADAPTIVE REUSE

The approaches to adaptive reuse of churches and of historic structures in general could easily be classified under two main headings. The first of these would be entitled the nostalgic approach and the second would be called the placemaking approach. The nostalgic approach leads to the preservation or conservation of as much of the shell of a building as possible. The alternate use for a building, while ideally complementary to the form of a building, is generally seen as a way to justify the preservation of the building. The placemaking approach, on the other hand, attempts to provide a space for the new use that is better than anything that could feasibly be built today.

The difference in the two approaches is primarily in the attitude of the designer or group seeking to reuse the church building. While the designer who follows the placemaking approach respects the form of the original building, he does not see his primary goal to be the preservation of that form. The main goal of the placemaking approach is to provide a rich envi-

ronment, textured in both time and materials. Certain aspects of the form are amplified and others revealingly juxtaposed to new construction. In achieving this goal the designer has made a place that is more exciting than the old building preserved as a museum or shell and more exciting than an entirely new building built on the site of the demolished historic structure. These two approaches result from the way the designer or group converting the building answers the question, "Why save it?".

Those who follow the nostalgic approach to the conversion of a church building do so as a result of several responses to the question, "Why save this urban church?". The first one might be, "We'll never see anything like it built again, there are no longer any craftsmen like that around," or "It's the only surviving example of...so and so major architect." Such responses might make the nostalgic, purist approach the valid one to pursue. Problems arise, however, when city administrators, planning boards, or preservation organizations with limited funds try to rank church buildings according to their architectural importance. The line is extremely hard to draw between a church worth a nostalgic preservation and one which is not, especially when the alternative is demolition.

Marcus Binney[1] writes in "England:Loss" of the difficulties that arise when a church is judged by purely architectural historical standards. Buildings are judged in relation to major works of a period or an architect rather than on the merits of the building's quality in relation to its surrounds or the lively spirit introduced by a vernacular deviation from a stylistic norm; or, they are judged as monuments independent of their con-

tribution to the landscape or streetscape. Even when purist architectural historical standards are transcended and church buildings are saved for their value to the formal cohesiveness with or interest provided to the immediate neighborhood or for some other less archival or academic reason, many times the impact of the building in the neighborhood is not sufficiently analyzed or the reasons for saving the building remain too fuzzy, and the designer reverts to the nostalgic approach when planning the reuse of the building.

If the answer to the question of "Why save this urban church?" is based on some appreciation of the formal contribution of the church to the neighborhood rather than its contribution to the stylistic development of a century, then the placemaking approach should be followed. The new construction involved in the reuse should be designed to enhance the major contributions of the original building but certainly needn't preserve the entire shell. The placemaking approach should also be followed when the answer to "Why?" is based on a realization of the sentimental or emotional value of the building to the neighborhood.

A church building is usually sufficiently rich and recognizable in form so as not to require preservation intact in order to be strongly reminiscent of the building once there. If the changes are made with the proper respect and care, the result is an enhancement of the original building. When the placemaking approach is chosen, greater flexibility is allowed on the selection of a use and the options are no longer either museum-like nostalgic preservation or demolition. When a structure is merely old and not historic, by whatever criteria that is

decided, and the place-making approach is followed, the disappearance of the church can be gradual as it fades into the city fabric. It becomes part of the continuity of change that has been characteristic of city buildings since prehistory. As emotional ties become weaker, the building becomes less of a monument. Perhaps, it is merely waiting until the day that it is re-discovered as a church, dubbed historic and renovated to the condition in which it might have been for the brief moment of its original dedication.

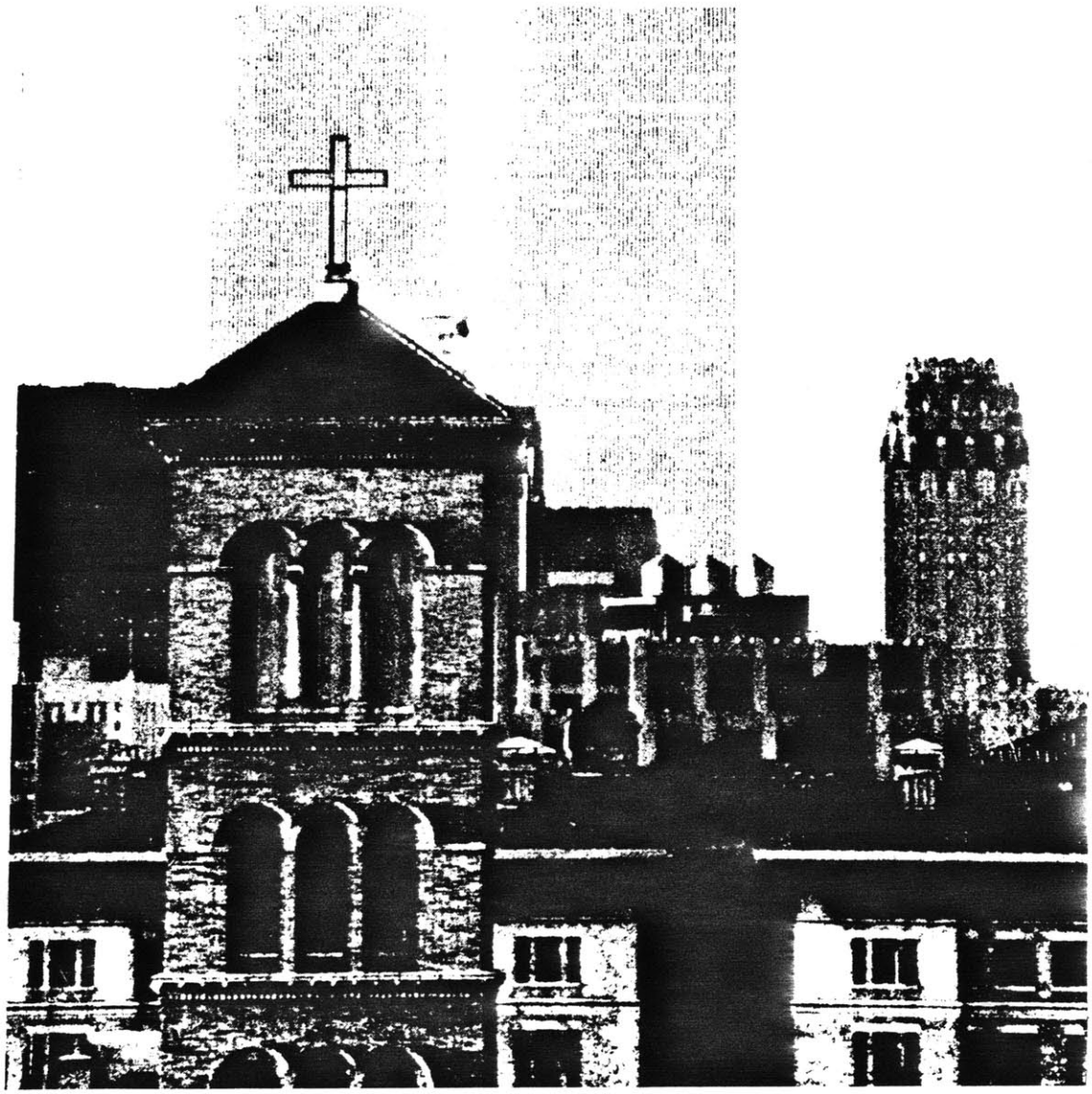
* *

CHAPTER 2
WHY SAVE THIS EMPTY CHURCH?

Interior and Exterior Scale

Once the approach to the adaptive reuse of a church building has been decided to be placemaking rather than preservation, careful analysis of the qualities of the building to be preserved or enhanced must be made. This analysis can be described on a generic level and then particularized for a specific church. On a generic level it becomes not only an analysis preceding design but also an argument for considering abandoned church buildings as more than white elephants. In most cases, the qualities of a church building to be magnified in a conversion are strong enough and rare enough in daily experience that thoughtful consideration would make demolition unthinkable.

The first of these qualities to be considered is scale. Experientially a church building is usually larger than the majority of the buildings in its neighborhood. Physically a church building is either larger or smaller, but almost always in contrast with, the neighboring physical environment. The case of a church building seeming larger than its surroundings and physically being larger than its surroundings is easily understandable. The second case where the



building in a major metropolitan area is actually smaller in floor area and roof height than most surrounding structures, yet is perceived as larger and grander in size than anything in the neighborhood, is much more mysterious. Both the space itself, and the sensations with which it leaves the visitor, have an element of mystery.

The construction systems with which ideal or prototypical churches were built were conceived to appear straightforward yet retain an immeasurable dimension in their size. This becomes more apparent when one realizes that most American

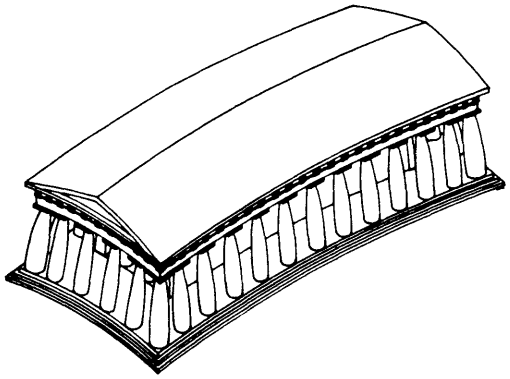
churches until the very late Victorian era were based on one of two models. The first of these was the Medieval and the second the Attic. The late Victorians, while still looking to these models, also looked again to Byzantine examples of church buildings for inspiration. All three prototypes while related chronologically in sources of vocabulary are spatially distinct. In addition to a common source for their construction techniques and ornamental vocabulary, all three prototypes remain slightly mysterious as to scale despite comprehensible construction systems.

The early medieval churches were built of heavy masonry piers, joined, on either side of the nave, in an arcade or colonnade carrying a thick clerestory wall only very tentatively pierced with small windows. Somewhere under the east end, under either the choir or the crossing would often be found the relics of a saint or major religious happening. The relics were usually housed in a crypt designed with narrow passage ways and small arches to recall the catacombs of Rome. Sometimes they were visible from above, sometimes accessible only from entries to passageways in the choir. The ambiguity of scale resulted from the combination of minimal lighting, heavy masonry that bespoke a much larger space than the one that in fact it framed and the contrast between the tight underground burial chamber and the ordered ceremonial space above it from which one entered the crypt and to which one returned.

In terms of the length of time required to build a cathedral, early medieval architecture progressed rapidly to the High Gothic style. The structural virtuosity that characterizes this style remains a mystery even today. Despite extensive study with sophisticated methods such as computer models and polarized photogra-

phy, the play of forces that keep the buildings standing and roofed remains open to debate. The master masons were seemingly trying to negate scale and building and were seeking to create only a new space, not a new building, infinite and other worldly. The translucent colored window wall made the scale visually and experientially unmeasurable.

Attic builders also created conflicting clues as to the size of a temple and thus made the straightforward post and lintel system less simple than it appears at first glance. The columns were carved to be narrower at the top, making them seem taller by the reinforcement of the perspective diminution. Bernini was aware of the role of ambiguity of scale in heightening the powers of a building and its appropriateness for a religious structure. This can be seen in his colonnade for the forecourt of St. Peter's in Rome. Here he applies his knowledge of perspective to make the building seem closer than it is to a visitor approaching on axis. In so doing, he makes the building seem smaller than it is, until the visitor is almost within the portico. This contrast between the expected size and the actual size makes the actual size seem even greater than it is.



The third major prototype for American churches which began to be seen in the late 19th century was the domed centrally planned Byzantine churches. The builders of Byzantine churches delighted in structural ambiguities that caused a marked difference between the measured size of the space

and the experiential size of the space. A typical motif that tends to make the space ambiguous is the windows under the dome. They pierce the base of the dome, where it appears to be heaviest, causing the dome to appear to float above the space. American Victorian churches which were influenced by Byzantine models express the spatial organization of the central plan of Byzantine churches through multiaxial spaces. The axes fan out from the altar space towards the vestibule. The visitor's perception of the sanctuary depends on the axis from which he entered the space.

Spatial surprises and ambiguities as to scale are not limited to church architecutre. However, carefully conceived subtle orchestrations of spatial experience based on the senses of the visitor are not that common in today's built environment. When they do occur, it is usually in church architecture.

Although there are few American churches that reach the level of spatial experience of the ideal prototypes just discussed, there is usually some remnant of the impulses that inspired the original in the provincial or revivialist versions. Manifestations can be as simple as a regular rhythm of pilasters that speeds up at the altar, or an aesthetic that specifies dark woodwork and a concentration of light at the chancel. It is this level of care that makes the scale and size of a church building of more impact and import than the double height polished stone lobby of a high rise office building or the glaringly bright school gymnasium. Because the typical church space is designed as a whole with each element of the design, whether ornamentation or opening referring to and relying on another for completeness, the space is perceived and experienced as a whole. The visitor is part of the whole, he is not just passing through on the way to,the elevator, or sitting in the

stands forbidden from walking on the floor of the main part of the space. For these reasons, even when the church building is physically smaller than many other spaces, it plays a larger role in the spatial memory of the visitor. Experientially it is a larger space; it is sufficiently ordered to be coherent, yet it retains enough mystery to be exciting and remain prominent in the memory.

Perspective effects also are used to enhance the scale of the elevation and massing of the church building. The effect of the non-cylindrical and slightly leaning columns of Attic

architecture, discussed in relation to interiors, also works on the porches of Georgian and Greek revival and other Attic inspired churches. The steeple, with its elongated pyramidical form exaggerates the perspective effect and carries the eye seemingly far above the surrounding structures. Thus, most churches in a dense downtown urban environment where they are dwarfed by the surrounding towers of apartment blocks are important because of their illusionary largeness. They are also important because they are small. Their traditional religious and sentimental importance has allowed them to exist longer than their former smaller scale neighborhood. Their relative smallness is important in this case because they allow a bit of serenity and breathing room in the streetscape. They also allow a bit of light into a canyon floor-like street.

Because of this contrast with their surrounds, they function as landmarks as described by Kevin Lynch.[2] By his definition a landmark must be unique in relation to its surroundings, have a clear form and contrast with its neighbors in siting, age, or scale. He sees landmarks divided into two types, divided according to the level of reference at which they are recognizable. The first type of landmark guides the newcomer. Mainly tall buildings are included in this group. Unfortunately, these tall buildings lose their value once the newcomer has arrived in the correct region of the city. The degree of care shown by the designer for how the typical tower meets the ground or responds to its neighborhood is usually not sufficient to allow the building to have a total landmark function. The typical tall building lacks the qualities necessary to be recognizable at any except the long distance level of reference. Depending on the density of the towers, a church can

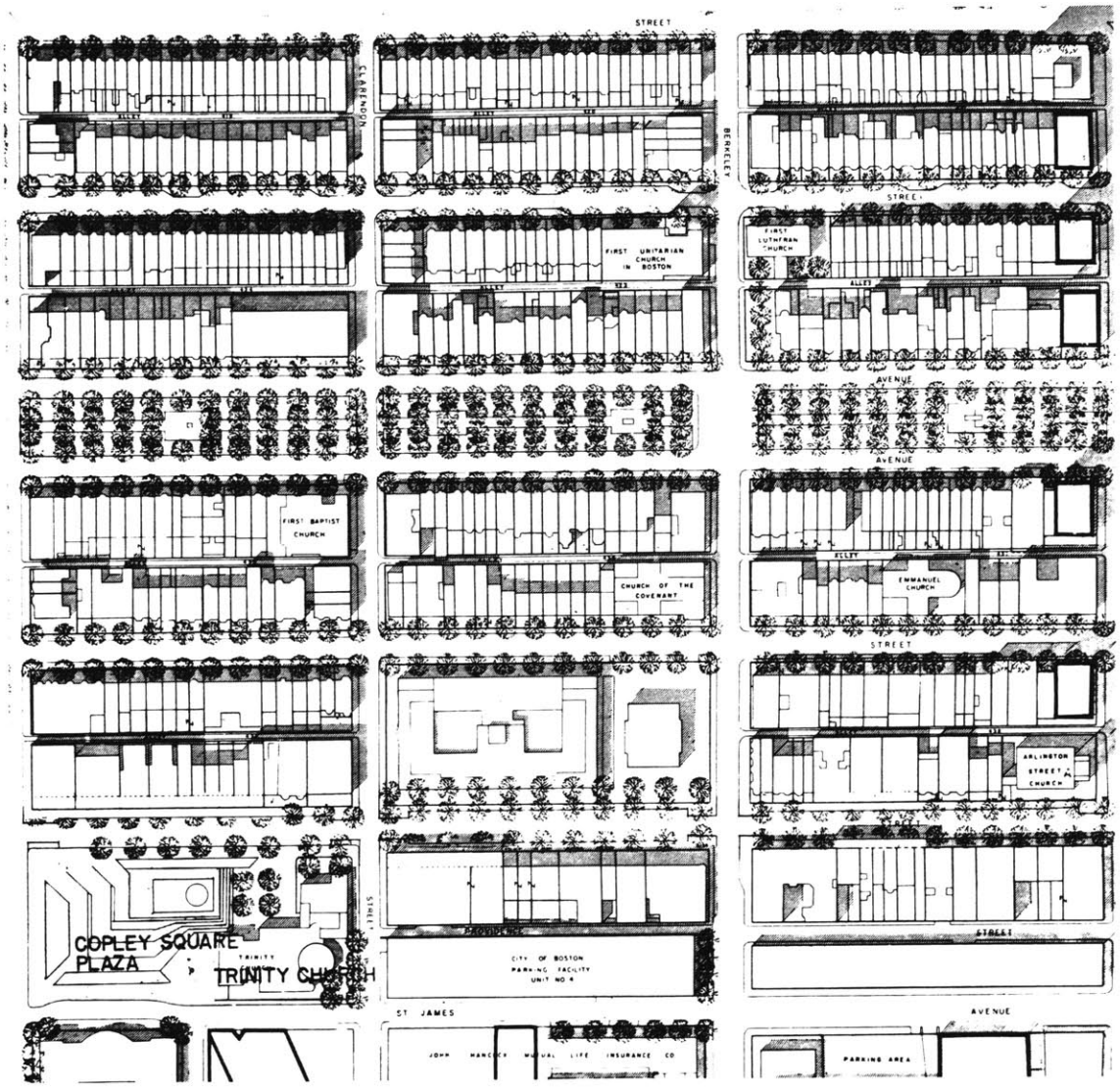
frequently belong to but not be limited to this group. Lynch calls the second group of landmarks local landmarks. This group includes those buildings with a variation in setback in relation to their neighbors, a more comprehensible variation in height, or a more memorable display of craftsmanship or care. Most churches also belong in this group. In playing this dual role in the imageability of the environment, they are oversized in relation to the less memorable buildings of their reigon on perceptual maps drawn by artistically naive respondants. Thus, the paradox: in smallness there is largeness.

Rhythm and Organization of the City

The contrast in scale between a church building and its neighbors also plays a more formal role in the cityscape. Besides helping to make a city or town comprehensible, the siting of church buildings often plays a major role in making a city formally satisfying. They do this in three ways: by introducing punctuation marks in residential neighborhoods, by providing a critical mass which can impart dignity to a town common or major street intersection or by providing a radial hierarchy to a town plan clearly marking the center. The Back Bay of Boston is a good example of the

first case, the town of Cambridge can demonstrate the second, and the medieval cathedral towns of Florence, Strasbourg or Vienna are examples of the third case.

Douglas Tucci[3] in Built in Boston emphasizes the French Academic influence on the urban design of the Back Bay. The model for Commonwealth Avenue was Baron Haussmann's Parisian boulevards. The houses, too, looked to the current French mode until the mid-1870s. While the infatuation with the French Empire style for residential architecture lasted only about 20 years and then returned to simple eclecticism, the Vic-



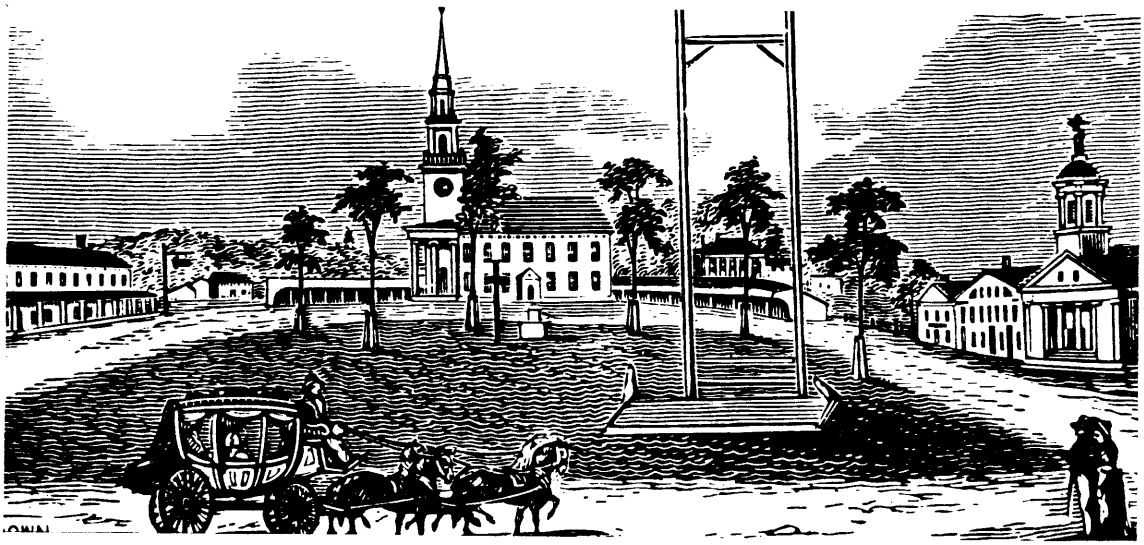
torian love of the picturesque that had begun in the 1840s remained strong in church architecture throughout this period.

The result, in the early sections of the Back Bay, is a very pleasing rhythmic division of the Back Bay streetscape into classical, French Empire style mansarded residential rows punctuated at alternating street corners with massive picturesque Gothic ecclesiastic structures. This pattern of relatively homogeneous horizontal rows of houses lifted 3/4 stories off the ground, stopped at street corners by the mass of a picturesque Gothic church which rests

on a base only a few steps above the street but whose spire reaches majestically to the sky, is also seen in an earlier form in the more pleasant sections of Charlestown, East Boston, South Boston, and the South End. The assymetry of the massing and the off axis tower responds not only to the stylistic trends of the century in which it was built, but also fulfills an important formal need. These picturesque churches give scale to what could be monotonous rows of busy residential dwellings and grandly solves the problem of the direction change that occurs when a row house meets a cross street.

Lewis Mumford[4] writes in his introduction to Back Bay Boston: The City as a Work of Art, that the designers of the residential architecture of the Back Bay, in trying to design houses more sophisticated and individualized than the provincial bow fronts of Beacon Hill, developed a fussy and pompous streetscape instead. The public architecture, too, contrasted with that of Beacon Hill. Where Beacon Hill builders had sought to achieve order and quiet elegance, Back Bay builders looked to diverse exotic styles. Mumford praises Beacon Hill for the townhouses which maintain a uniform subdued scale that is punctuated by elegant structures of public importance such as the spired churches which were built at a grander scale. Unfortunately, Mumford is right for the majority of the Back Bay. In the later sections of the Back Bay, the pivotal role formerly played by the asymmetric churches fell to large corner mansions. This solution was not as successful because of the unavoidable residential scale.

The second type of urban organization in which church buildings play a major role is that of the New England Town Common. The town common has its origins as meetinghouse lot.[5] The meetinghouse was the center of local activity. Since



the members of the religious society were usually a major portion of, if not the entire, town population, the meetinghouse was commonly used for both religious and civic gatherings. Sunday services usually lasted all day with a break at noon, and the meetinghouses were not heated. Taverns soon were built near the meetinghouse to provide a place to eat and warm up during the noon recess. Taverns were also the natural places for stage coach stops, and thus, the commerical center of town grew up around the common and the meetinghouse. When the functions of town government became complex enough to require a separate building, it was reasonable to build it near its original home in the meetinghouse.

When the town became more cosmopolitan and religious differences developed the new church was also built on the original lot, because all of the citizens felt that they had rights to it. A usual pattern in modern New England towns is to find the churches standing just across the street form the common. The sites on which the church buildings stand were usually part of the common. What had at one time been a simple footground path has become a

city street; and the property along the way to the church has become prime commercial property.

As towns grew and travel to the original church on the common became impractical or splinter church denominations came into conflict new churches were built on sites elsewhere in town. Usually, in order to preserve their status or to provide a place to bury their dead, the buildings were sited to provide a green space reminiscent of the common. In many modern towns this green space, when it hasn't been sold for sorely needed income or turned into a parking lot, is an important oasis of cool and green in a densely populated area. If the church is not preserved, neither is the green space.

Howard Saalman[6] describes the third type of urban development in which the church building plays a major formal role. He describes the walled medieval town which many colonial American towns followed as prototypes. He

characterizes the whole town as a fortified market, to which farming peasants brought their goods for sale. Unlike the Roman colonial town which had been characterized by an open square in the middle which was the marketplace, the medieval town developed open air markets surrounding the gates of the city. This was as far as the farmer needed to travel to benefit from the protection of the walls and the concentrated population. If he sold his goods just outside the gates, he avoided taxes. The cathedral took the center position in the town with smaller churches for the neighborhoods squeezed between

the streets leading from the center of town to the gates. There was usually a small open space, the close, around the choir or to one side of the cathedral, but the main facade was usually directly on the street with tiny houses and shops clustering densely about it so as not to waste any valuable street frontage.

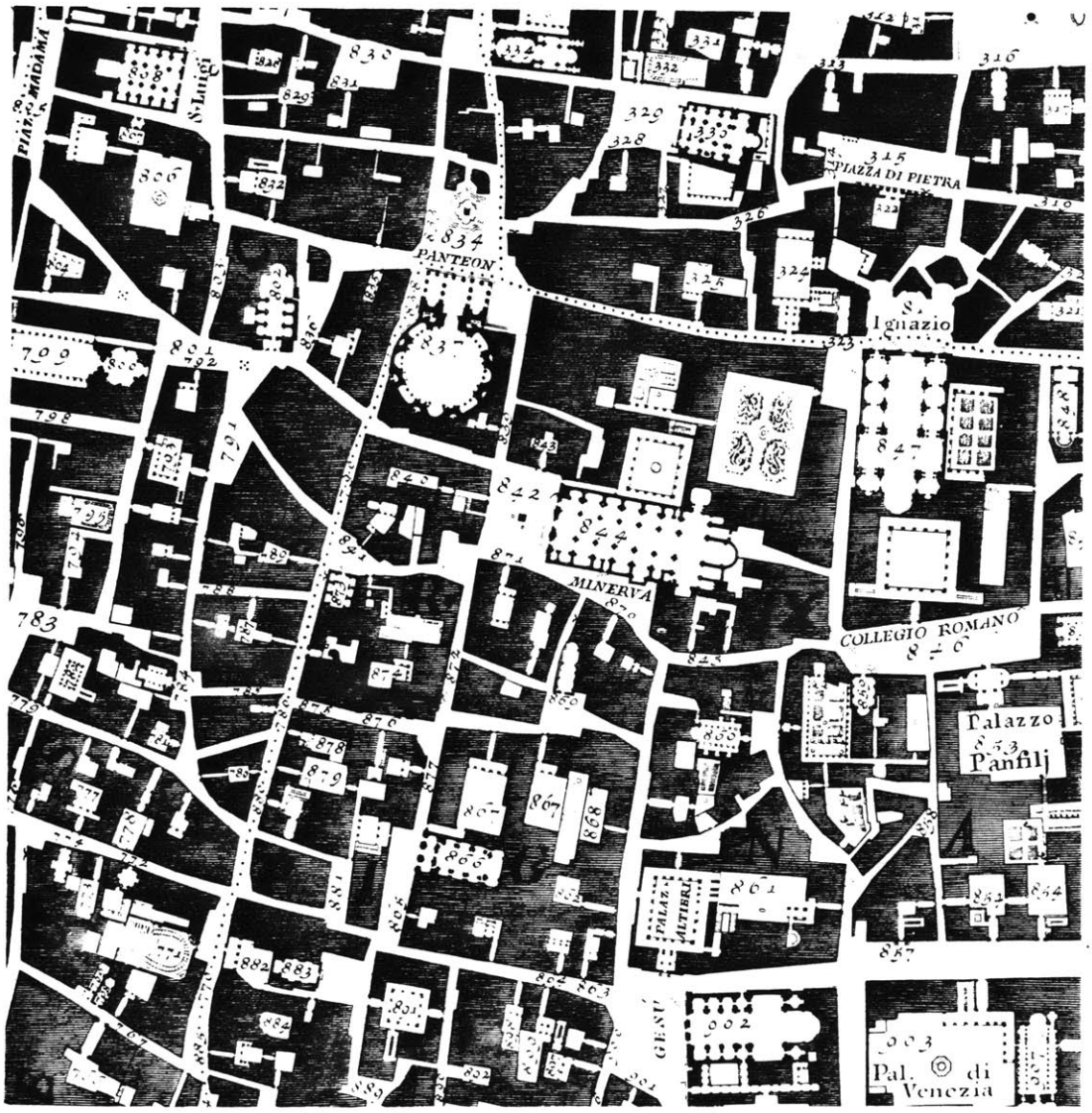
Modern American cities are a combination, with numerous variations, of these three models of city organization. As with the Back Bay, neighborhoods within a city often follow varying forms of organization leading

to a richly patterned city. When a church building plays a less pivotal role in the organization of the city it at least introduces an accent or pausing place in the sweep of the predominant directional forms. To be important in the formal delight of the city the church building need not only be a monument or two sided corner building. It can provide excitement by being a larger scaled segment of the urban wall or a provider of green space in a densely populated section of the city. When a church building is not an exclamation point it is at least a comma.

Many pleasant neighborhoods have been injured by modern architects building as if every building was a punctuation mark. Once cohesive streets often look like a string of deleted expletives. The number and distribution of church buildings in a city; however, is usually determined by the neighborhood population size and the minimum size for a congregation. Thus, the frequency of urban churches as monuments does not impede the development of syntax.

Protected Public Space

The church has a long tradition of being public space. Nolli in his map of Rome of 1748 hatches private buildings but uses the plan of the building to indicate a church. He leaves the interior of the building unshaded, symbolically equating it with the other open or public space in the city. For more than three centuries, St. Paul's Cathedral in London fulfilled the function of public space. Judging by published complaints, mostly from bishops and the like, the contemplative quality of the space sometimes suffered due to its popularity as a meeting



place. J.G. Davies[8] describes it as a "promenade, a popular resort for London men about town to swap gossip and generally pass the time in social intercourse, although this on occasion could involve open quarrels."

Promenading in St. Paul's had become such an established tradition that not even the Great Fire of London, although it destroyed the building, did not destroy the tradition. Over thirty years after the fire, when Christopher Wren's new St. Paul's was opened, the new cathedral once again became a promenade. There is evidence that promenading regularly in the local cathedral

was not limited to St. Paul's. However, it ended in the late 19th century when the Ecclesiologists campaigned to elaborate the ritual of worship and to regard churches as sacred shrines.

Today's city needs more places with the characteristics Nolli attributed to 18th century Roman churches, spaces somewhat akin to a Hyatt Regency lobby, only fully public where all are admitted. If the church were converted to another use that brought people all day, a fuller publicness of the building could be encouraged. The space could be converted to being a sheltered place from which to watch the world go by while chatting with cronies or to pass through like a protected alley, while maintaining a vestige of its former role as a place to stop for quiet as an escape from the rush of the busy street.

Because of the traditional publicness of a church interior, it is difficult to justify the standard preservation approach to reuse. In this approach, adequate legal methods have been developed so that the exterior of an historic building can be considered virtually public property and is usually required to be preserved intact. The nature of a church space is such that, while legally the building is owned by a private entity, it is traditionally a public interior as well as exterior. The conclusion that leads from acceptance of this tenet is not that the interior should be preserved intact as publicly controlled exteriors currently are. The type of conclusion that should follow instead is that an appropriate use, other considerations being equal, should be one that preserves the public quality of the space or one that keeps at least some part of the building open to the public with a use that is complementary to both the general public and the other users of the building.

Craftsmanship and Care

One of the most valuable aspects of an old building as seen by Kevin Lynch[9] is the extremely high cost of replacing the structure with anything of nearly equivalent quality. Often certain features of the facility are irreproducible because of the loss of the skill of technical ability through disuse, or because the materials are unobtainable. In the case of church buildings, skill and care were often lavished upon them as physical embodiments of religious devotion.

Theology is changing and even active congregations are frequently seeing their monumental buildings as greedy tyrants requiring funds for expensive upkeep that could be used for program or stewardship budgets. Even if the craftmanship and pride exhibited in the richness of an old church building have less of a role in worship and the established church, they still are valuable amenities for everyday life. Some of the amenities Lynch lists include: rich form that adjusts easily to a more intimate scale and becomes even more complex when a new use pattern is overlaid on the existing form, and attention to detail that shows someone really cared.

Donlyn Lyndon[10] writes of the importance of the exhibition of care in the built environment and of the importance of pride of place. Unfortunately, he notes, the same delicate, finely wrought details of construction and craftmanship that are so powerful in creating pride of place are also the first elements to show neglect when priorities change. One way to reestablish the message of pride in the neighborhood or place, once neglect and inattention have taken hold, is to convert the building to a new use and in so doing renew its specially prized features; not to demolish and replace it. Demolition

Whoever thou art, if thou seekest
to extol the glory of these doors,

Marvel not at the gold and the expense but at the
craftsmanship of the work

Bright is the noble work; but being nobly bright,
the work

Should brighten the minds so that they may travel...

Abbot Suger at St. Denis
ca. 1130

only serves to reinforce the message of inferiority of place. "Buildings that incorporate the work of several generations offer complex evidence of the people who have...worked on the site."

Framework for the Present

As so many writers have expressed it, without a past there is no present and the future is seriously at risk. Marcel Proust[11] writes in Remembrance of Things Past, "Reality takes place only through memory." Modern cities without memories of or clues of their past to present to the newcomer, or that lack respect for the memories of the long term resident never become places. As Pierre Schneider has written in "Converting the Past," "The present provides the urban language's surface; the past its density and depth.[12]

The past must maintain the proper relationship with the present so that the depth of experience provided by a sense of the past does not destroy the liveliness of the present or vice versa. The best way for this to happen is never to let a building become part of history. When a building becomes venerated not for its spatial qualities, craftsmanship, or relationship to its surroundings, but for its place in the history of a stylistic or political continuum with the assumption that progress has gone beyond the time represented by the building, then it has become history, not the past. In a rich built environment the past is something experienced simultaneously with the present. Each is experienced with the other and the separation in experiential terms is only hazily discernible. Victor Hugo[13] wrote in describing the beauty of Paris that the past and the present exist "like the old text between the lines of the new."

When a building becomes a museum, a tourist attraction, a status symbol or object of cultural reverence, it has become part of history. When a building has been converted to a new use, when the structures of a new time have been laid on or around it so as not to subjugate either the past or the present and the characteristics of each are enhanced by juxtaposi-

tion to the other, then both the poetry and the logic of a satisfying environment are alive and the past can be seen as part of the present. Victor Hugo[14] continues, "What strange events, sometimes accumulated with the incoherence of reality, from which you are free to draw reflection."

Pierre Schnieder[15] likens the result of the adaptive reuse of a building such as a church building, which has so many integral elements symbolic of its former use, to poetry. The energy and magic of the adaptive reuse of a church building comes partly from the removal of blinders that results when a new use reveals formal characteristics that were formerly ignored. It also comes from the contrast of the new use with the memories, either experiential or connotative, of the old one. While a new building is often just prose, even sometimes very beautiful prose, in that it is a logical censoring of reality to a linear order, a converted building has the potential for being poetry. A converted building, in its layering of past and present is like poetry in that it "cultivates multiplicity, and polyphonic illogic" which lets the imagination loose to create a personal interpretation of the place.

Charles Jencks,[16] writing in Adhocism, advocates an architecture that makes visible the complex workings of the environment by combining diverse subsystems ad hoc. In the case of adaptive reuse this allows the designer to express the previous history of a building and results in an environment as formally rich and varied as urban life. Jencks concurs with the other writers included in this discussion that when the history of a place is articulated, both the mind and eye are pleased and the experience is of a higher order than either system alone, either old building as a museum or new construction without temporal context.

Stanley Abercrombie[17]

in introducing a feature in Architecture Plus on "recycling" has summarized it very well. He writes:

> "...it is clear that abandoned form may have details and volume no new construction could afford to duplicate; as a planning aid, it may contribute an inimitable personality to its neighborhood."

He continues:

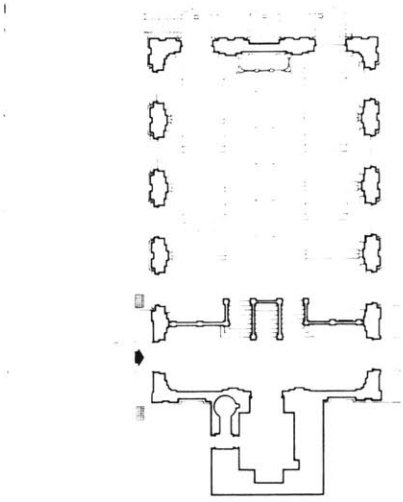
> "...it is often when the old and new uses of a converted building are most disparate, when the juxtapositions between past and present are most surprising that the result is best."

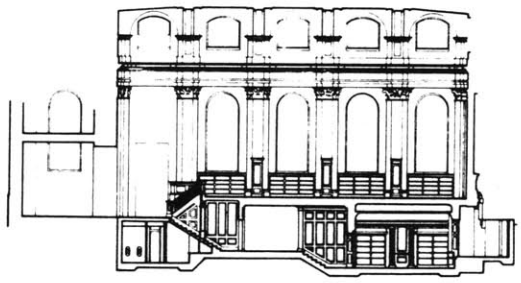
In the chapter that follows we will discuss these juxtapositions of old and new uses.

CHAPTER 3
WHAT DO WE DO WITH IT?

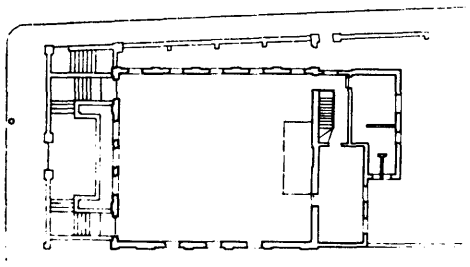
While there seem to be a list of possible alternative uses for a church building that will be acceptable to almost everyone, before considering any one of them, the goal of, or reason for, the adaptation should be established. If the reasons for saving a particular church building are expressed frankly, then the imaginations of those involved in planning the future of the building can be set free to discover a new use not considered in previous efforts. It is the standards of the community and the motives of the promoters of the project that will determine an appropriate use for an unused church building. Purely structural or spatial considerations are not significantly limiting. Churches have had uses as divergent as a furniture warehouse and a single family house, or as antithetical as a discount carpet store and an art gallery or a car showroom and a library.

In the summer of 1976 the Victoria and Albert Museum in London mounted an exhibit entitled "Change and Decay: the future of our churches." In a chapter entitled "New Uses for Churches" from a book published to accompany that exhibit, Patrick Brown [18] describes three major reasons for saving a church building for other uses: They should

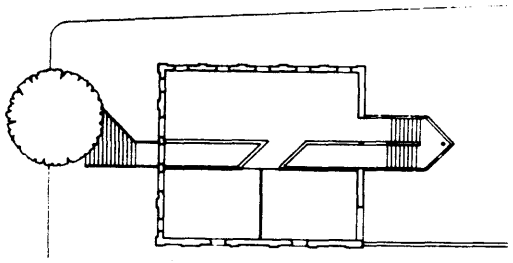




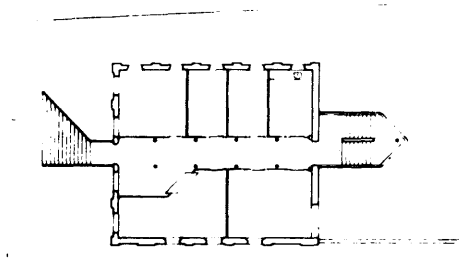
be reused to prevent the waste of design skills, energies, and resources already invested in the buildings; they should be saved because they are elements of value in the townscape; and because they are the focal points of community memories. Unfortunately, Brown sees that the first criterion of redesign, regardless of the new use, necessary to achieve any of the three goals just listed, is to keep alterations to the outside of the building to a minimum. Major spatial changes to the inside of the building should be made, he feels, only when major structural changes are the only



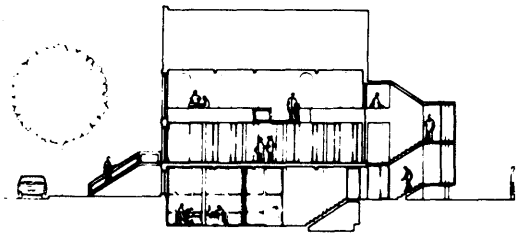
take an abandoned non-conformist meeting hall



. . . a new floor above for a showroom and offices . . .



add a new back staircase connecting to . . .



way that can be found to incorporate a use that will prevent the building from being destroyed. Using such renovation criteria, Professor Brown suggests that the most appropriate new uses for a church building are concert and recital halls, museums and display galleries.

In New Uses for Old Buildings Sherban Cantacuzino[19] sets the preservation of both the form and the spirit of a church as the main goal for the reuse of a church building. Thus, he feels that the ritual of a dining hall is more appropriately housed in a church building than the ran-

dom wanderings that characterize the use of a museum. The rituals of concert-going and the quiet contemplation that characterize the use of a library are both appropriate. When no uses are feasible that will preserve the spirit of the building, Cantacuzino feels that use by people is preferable to use by things. By these criteria, use as a drill hall or gym is more appropriate than use as a furniture warehouse. However, when the planning process presents the options of extensive formal alteration and use by people or formal preservation and use by things, Cantacuzino finds formal preservation and use by things more appropriate. Thus he finds use as a furniture warehouse more appropriate than the major spatial alterations necessary to turn a church into a dormitory.

Although Cantacuzino ultimately sees the preservation of the building or the form as the most immutable aspect of his two part goal, he does introduce the concept of the preservation of the spirit of the building. If the original purpose of the church building and its congregation was to serve as a tool for ministry to the community then perhaps a major reason for saving a church building is often an attempt to preserve some aspect of this ministry. If preservation of the spirit or the ministry of the building is the main reason for finding an alternative use for the building, then a new list of uses can be introduced as possibilities.

If the goal of the reuse of a church is service to the community and the preservation of a community ministry, then the spatial or formal preservation may have very little importance, symbolic issues may become far more complex, and the array of possible uses expands considerably. Uses that could be considered when working to achieve the goal of community ministry include clinics or community health care centers, semi-

communal living facilities such as half-way houses and apartments for the elderly, community activity centers and sports centers. Each of these uses, while potentially more destructive to the pure formal characteristics of a church building, are compatible to the spirit and traditions of the Christian church.

In medieval times the great pilgrimage churches of Europe frequently filled the secondary function of hospitals. Travelers, who often had started their pilgrimage to seek a cure for a serious illness, occasionally became too ill to continue and the church became the place to stay. Sleep near the relics and shrines was considered beneficial and many miraculous cures are reported as a result of an extended stay in a church.[20] Viollet-le-Duc writes of the value of the use of altars as a therapeutic tool.[21] In the 15th century in Beaune, a French village in the Soane valley of Burgundy, an institution called a hospice was founded in a monastery to minister to the sick travellers passing through the valley towards Marseilles. The form of the building that housed the hospice is of interest in the context of this investigation. Like a parish church, the hospice had a central nave, two flanking aisles, and a chancel at the east end. The beds were arranged in the bays of the aisles so that a simple turn of the head focussed the patient's attention on the altar in the chancel.

The more relevant information to this discussion, however, is Bruno Bettleheim's[22] description of the characteristics of the image of a health care institution. He writes that the building should be large enough not to appear confining, yet small enough not to be overpowering. It should maintain a certain separateness or individuality yet fit harmoniously into the neighborhood. It should be sturdy and substantial yet com-

fortable. It should bespeak grace and be aesthetically appealing. Its elevation should explain its form and organization. Above all the building must have dignity. If this dignity is time tested, so much the better. What better structure fits such a description than a church building in need of a new use?

It is the responsibility of the conversion designer to insure that these qualities of a church building are enhanced, or at least preserved in the course of the conversion to a health center. It is also the responsibility of the group writing the program to realize that the physical space of a health center can provide more than waiting rooms, labs, examination cubicles and doctors' offices. In converting a church building to a health care center, a wonderful opportunity exists to create a therapeutic tool analagous to that envisioned by thinkers as disparate in their approaches as Viollet-le-Duc and Bruno Bettleheim.

The custom of fleeing to the church upon committing a crime was well established in the middle ages. Abbot Suger[23] of St. Denis saw it as such an integral part of the function of a church that he mentioned it in a dedication to the patron saints. Included in the verse he had inscribed on the tombs of the patron saints are the lines:

> This place exists as an outstanding asylum for those whom come;
> Here is a safe refuge for the accused, where the avenger is powerless against them.

By the late 13th century the practice of seeking sanctuary in a church became so common that Edward I found it necessary to regulate it. He ordered that sheriffs be placed on watch at a church when an accused felon was hiding out there, in order to prevent his escape before an investigation had determined his guilt. If the person was judged guilty, he was allowed to live in the church for forty days before being escorted into exile.

If after forty days the criminal did not come out, it became a felony for anyone to bring him food or water.[24]

While churches are no longer able to grant sanctuary to convicted felons, symbolically they still could represent benign and forgiving forces in the world. With this idea in mind the reuse of a church as a halfway house for prisoners soon to be paroled or on work release would be another way of perserving the spirit of the ministry of the church. When this proposed use is studied less literally and symbolically the problems on a psychosociological level become apparent. Such a use would require careful thought from the viewpoint of the prisoners. Because of the alleged character of the inmates, halfway houses for prisoners are rarely integrated into community life, anyway, and thus a house that stood out so magnificently would not be as problematic as might be imagined. Using a structure as unique as a converted church could make such separation a positive, somewhat grand thing. However, in the case of halfway houses for formerly institutionalized mental patients, retarded adults or drug addicts, a reused church with its landmark quality would be somewhat less appropriate.

In addition to the conceptual appeal, there are several use possibilities in halfway housing and apartments for the elderly that make them have some formal appeal as well. These opportunities for formal interest occur in the possibility of maintaining a small chapel using the original space with a different set of proportions or in the possibility of designing multi-purpose rooms that could be finer than anything that could be found in a building built from scratch. Unfortunately, in order to preserve some of the spatial qualities of the place, particularly the multi-storied windows, multi-leveled aparments would have to be de-

signed. Such apartment designs are not compatible with elderly housing.

In the case of elderly housing, three factors would have to be weighed before the appropriateness could be decided. The possibility for the achievement of exciting congregate spaces must be weighed against the drastic slicing of the remaining space necessary to provide comfortable single level units for the elderly residents and the possible formal loss must be weighed against the possible conceptual gain of preserving the ministry of the church by providing for an important neighborhood need.

If standard market housing is considered, exciting multi-level vertical spaces centered on beautifully detailed windows and non-orthogonal spaces can be achieved; however, the possibility for any public spaces of a larger scale will probably be eliminated as well as the possibility of expressing the spirit of the church's former ministry. The ideal multi-residential conversion would include both dramatic private spaces and grand public spaces.

The only argument that can be made for the conversion of a church building to private market rate housing is a formal one. There are possibilities for exciting juxtapositions of scale and intriguing presentations of formal elements such as the springing points vaults or column capitals in a new setting. If the conversion is not done well, it is a multiple disaster in that the space has been destroyed with nothing comparable to replace it, and the opportunity to use it for a more conceptually appropriate use is lost. If it is done well, it could be more spatially exciting than any of the more appropriate uses discussed thus far.

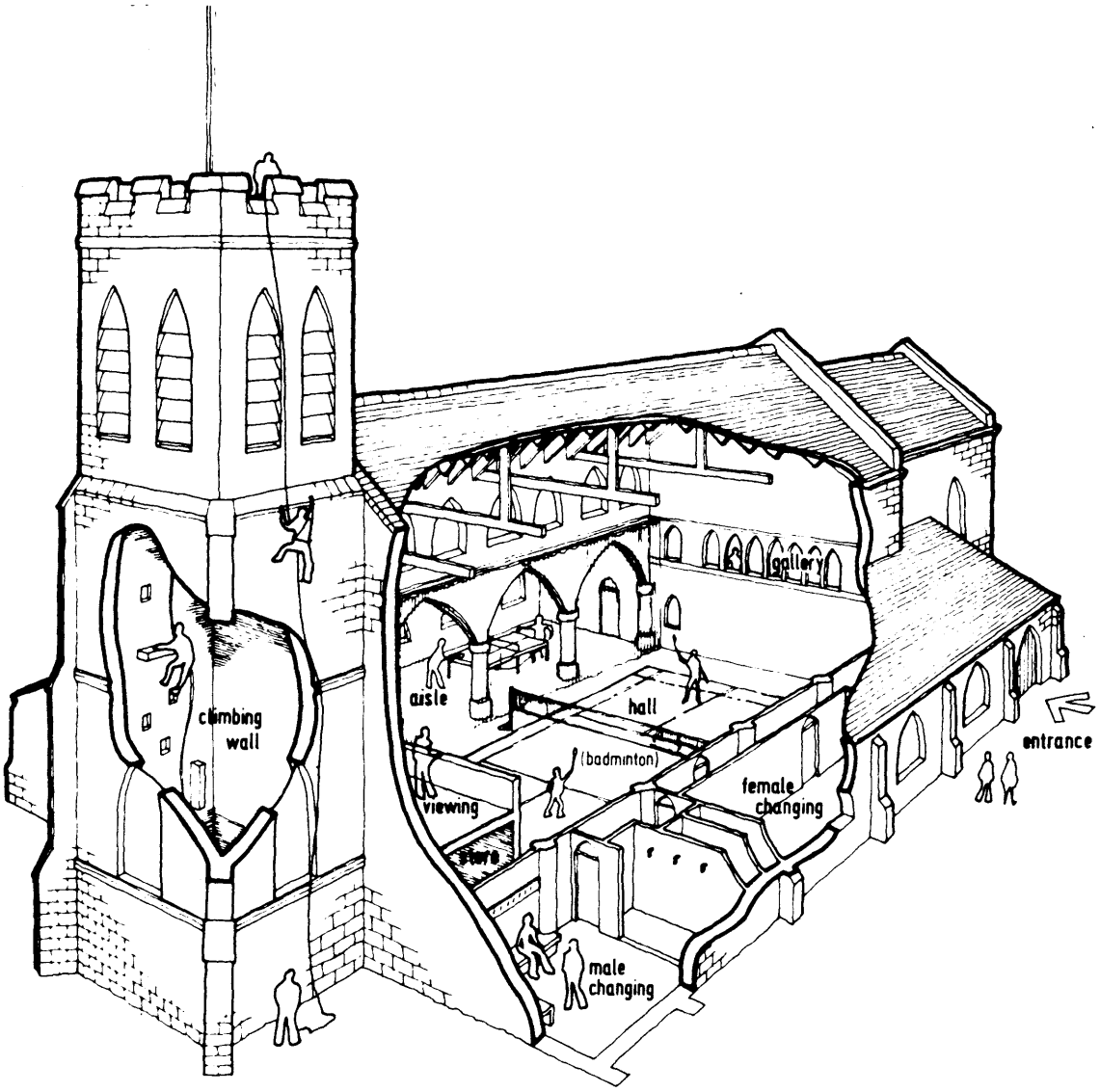
Unlike the previous uses discussed, the term "community center" can mean many things. The best way to envision the use of a church as a community cen-

ter is to list some of the uses to which churches have been put. They are each seen as a way to strengthen a sense of community by bringing amenities into its midst. Such community strengthening can be seen as an appropriate way to preserve the spirit of the church.

In York, England, the former St. Sampson's was a Gothic revival building with stone piers and arches and a roof of wooden trusses. It has been converted into a day center for the elderly. A major portion of the main nave space has been left spatially intact with only areas of carpeting, clusters of chairs, and track lighting added to provide a more intimate dimension to the hall-like space. Secondary spaces have been built that are independent of the original structure and could be easily removed without harming the original.

There are also examples in England of smaller churches being used as Red Cross headquarters, with office space in the former chancel and lectures and volunteer sessions in the former nave. Another example is a rural church being used as an adjunct classroom with laboratory and lecture space for continuing education courses.

The use of a church as a community center can be remarkably easy and need not even be an alternative use. Instead it can be an expanded use. In early Christian times, before the acceptance of Christianity as a state religion by Constantine and the adoption of the basilica form as a symbol of official approval, churches were merely modified houses designed to serve the needs of the Christian community and composed of several inter-related non-hierarchical spaces. It is beyond the scope of this investigation to discuss the numerous renovations of church spaces by congregations expanding their ministry and inviting a broader section of the community to share their space. The list of these types of alterations is too long and the



process is usually an evolutionary one, where the problem to be solved is only very secondarily architectural.

The use of a converted church building as a gymnasium or sports center is another possible definition of "community center." Such a use seems highly compatible with the physical form of the typical church building. Despite the noise and smells associated with such a use, it could also be seen as an extension of the ministry of the church. The typical church space is usually high, and the main nave column-free. While the size may not be

adequate for a full basketball court, a half court, volleyball, dance classes or gymnastics could easily be accommodated. A gallaried church would provide wonderful spectator space, and the vestry and other support spaces, with some new plumbing added, could become locker rooms and equipment storage spaces. Because the conversion would require so little structural change, special attention would have to be given to alteration of the image the building presents to the general public.

Perhaps the most difficult goal to achieve in converting a church to secular use is in fact the preservation of both the spirit and form of the church building. In reaching for this goal, it seems too easy to parody the former use of the building, to replace the previous focus of veneration with one much more materialistic and mundane or one that is viewed by its similarity to Christian worship as competition or anti-church. A current example of reactions to this problem is the refusal of the Anglican church to allow conversions of churches to mosques or Masonic temples. The same administering board, however, has been very willing to allow symphony orchestras to take the place of the altar on the dias in an essentially unaltered sanctuary. Perhaps there is holiness in beauty.

If one accepts the ability to reason as one of the higher faculties of mankind and sees the progression of the increasingly secularized world as a growth beyond a reliance on metaphysics to provide an oversimplified view of life, as a growth toward the perfection of the powers of logical investigation and reason, then perhaps the use of Notre Dame as a temple of the Cult of Reason during the French Revolution, seems an appropriate reuse of a church building. The Bishop of Paris resigned and was replaced under the baldachino by an actress

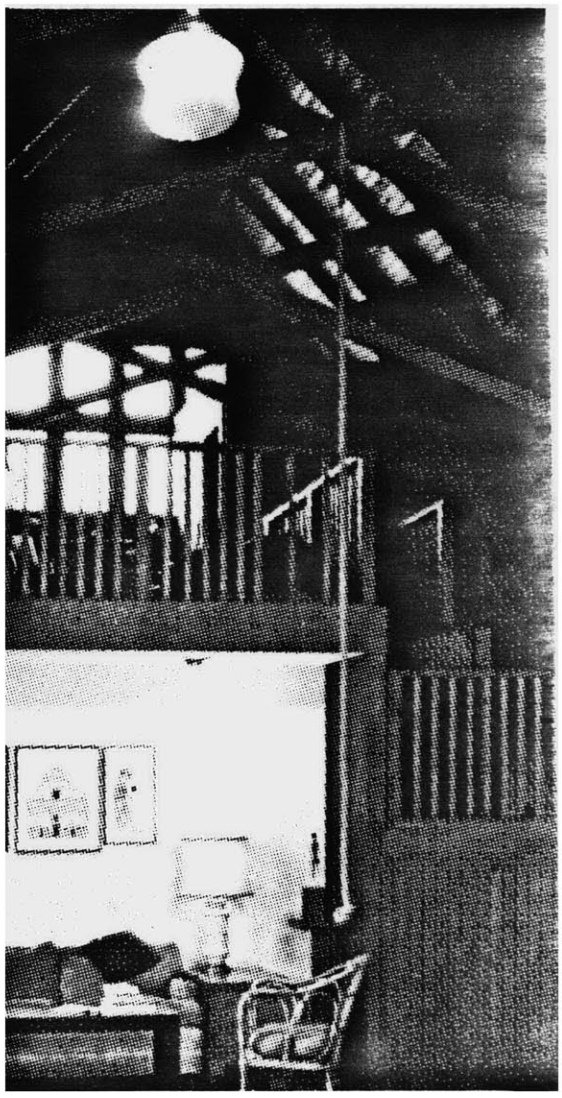
arrayed as the goddess of Reason. Children were baptized into the cult and great ritual dances proceeded around the nave. Such a conversion left the form untouched and captured the spirit of the building as Sherban Cantacuzino seems to have defined it. The extreme nature of this example sets the issue of parody and symbolic insertion into relief. The question remains, however, as to where the line of appropriateness is to be drawn in the continuum between use of the aspe as a stage for a symphony orchestra and the replacement of the bishop by the goddess of Reason. It is a question that can only be resolved on a case-by-case basis by some sort of dialogue within the community involved.

Patrick Brown[26] reports frequent community opposition to the conversion of a small church to a single family house. Although he can understand the resistance, he sees such a conversion of a picturesque country church as preferable to its demolition and the resulting loss of either an historically valuable artifact or a pleasing country vista or both. He describes several such church to house conversions where the use of the nave as a central studio space with the chancel and galleries altered to provide the more private spaces. Sherban Cantacuzino, on the other hand, is firmly opposed to conversion of a church into a private home. He writes that such a conversion would "alter, radically and irreversibly, the spirit, form and character of the interior space and so of everything that would spell 'church'."[27]

In a literal sense, the conversion of a church to a single family home should perhaps be more accurately labeled a reversion. As has been mentioned previously, the earliest Christian churches were single family homes. This irony is only preceived on an intellectual and not on an experiential level and thus

the conversion of something once communal and public to the most private of domains seems inappropriate. Spatially, and formally, however, the proposal remains viable and attractive. If an effort is made to alter or erase enough of the exterior elements that spell church, then the alteration of the interior becomes a personal issue and not within the realm of community consensus.

Because all possibilities for public accommodation are denied when a church is converted to a single family house, Professor Brown is right, it should only be an acceptable alternative when the only other is demolition and replacement by a new structure. If, however, the goal in church conversion is less the preservation of the urban, public environment and more the development of unique and spectacular interior spaces then perhaps conversion of a church to a house is appropriate. In single family house design, there is more room for ad hoc experimentation. The character of the church could be changed through the discovery of new spatial relationships. The result could be less ambiguity of message then we have seen in any of the uses already discussed.



William Wordsworth[28] suggests the final option for reusing a church building so that it remains an urban amenity, formally exciting, and so that some of the essence of its original use survives. Although not in so many words, he suggests selective and sensitive demolition, creative landfill and picturesque plantings, so that the old church building might become a vest pocket park. He says it much more beautifully, and with more remorse:

> Well have yon Railway Labourers to this ground
> Withdrawn for noontide rest. They sit, they walk
> Among the Ruins...
> Others, look up, and with fixed eyes admire
> That wide spawned arch, wondering how it was raised,
> To keep, so high in air, its strength and grace.
> And by the general reverence God is praised.
> Profane Despoilers, stand ye not reproved,
> While thus these simple hearted men are moved?

* *

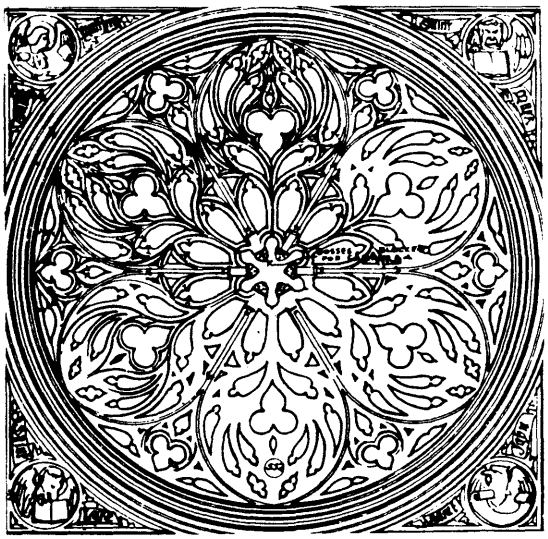
CHAPTER 4
BUT, IT JUST LOOKS LIKE AN OLD CHURCH !

In dealing with the symbolic elements of a church building, one must realize that some of the most powerful elements of a church building are those that are its most symbolic. This makes it very difficult to alter the symbolic quality or image of a church building without stripping the church of much of its special quality. In approaching the problem of changing the image of a church so that it reads as a new building type, one can start by an analysis of the building that separates symbolic elements into two types. The first of these would be symbolic elements that gain their meaning by acting through the senses. The second type of symbolic element gains its meaning by acting through the memory or intellect.

Rudolph Arnheim[29] labels the first type of symbolism as sensory symbolism or heightened expressive qualities. Elements of sensory symbolism are those which could be expected to cause a similar emotion or reaction in individuals of dissimiliar cultural backgrounds. Arnheim feels that the more symbolic a building is, i.e. the more metaphoric it is in expressing elementary non-physical properties, the more successful it is as a work of architecture. When a work of architecture transcends mere intellectual

or literal symbolism and is able to express the more elemental aspects of human experience, it remains valid and worth saving despite changes in doctrine or philosophy that make more conventional symbols quickly irrelevant. As an example of sensory symbolism, Arnheim describes morning light falling through the choir windows onto the altar as symbolizing enlightenment and blessing, regardless of religious belief or cultural background.

Further examples of the generic or sensory quality of elements in church design are the rose window and the dome. The dome, at a level of meaning which is dependent on a specific cultural background could represent Heaven. However, the dome is just as powerful on a more elemental or sensory level where it represents the heavens or sky, regardless of cultural background. The rose window displays the same duality of meaning. On an intellectual level of symbolism, the rose window is clearly a major element that makes a Gothic cathedral or chapel read as such to the passerby. However, on the purely sensory or cross cultural level, with its centric symmetry and jewel-like colors, it is a symbol of undisturbed concentration or meditation. Its cross-cultural counterparts are seen in such meditation aids as the mandala.



The rose window also serves as an excellent example of the dilemma that results in a church conversion when dealing with many elements of a church that are symbolic on an intellectual or cultural level. Many of the elements of a church building which were originally used in church design because of the generic or sensory quality of their

symbolism have become, through repeated use in churches, important elements that cause the church to be read as a church. Thus, when conversion architects are confronted with what Robert Venturi[30] has called the image of a building and must alter it, they will not find a clear division between elements of sensory symbolism and those of purely literal or intellectual symbolic message.

Robert Venturi[31] deals with the question of image and the intellectual level of symbolism and sees it to be as important an element of total building design as Rudolph Arnheim sees sensory symbolism to be. Venturi points out the richness that can result when conventional intellectual level symbols are added to or juxtaposed in an unusual fashion. Following his proposals, it is easy to imagine the possibilities for image alteration in a church conversion when symbolic elements are given a new context or placed in a new scale relationship rather than being obliterated. "The familiar that is a little off has a strange and revealing power."

Elements of Image and Their Modification

The Roman basilica is described by Richard Krautheimer[32] as simply an assembly or meeting hall which had a variety of uses. It was characterized by an oblong plan, topped by a timber roof and ending with a rectangular or apsoidal tribunal. Its name would then be modified according to its use. A Christian basilica was labeled "basilica id est dominicum," i.e., an assembly hall that is a house of the Lord. Bruno Zevi[33] maintains that while imperial basilicas are known which had entries solely at one end, a second type with a grand entry on the long side and various combinations of axes was far more common. He then points out that the Christian basilica always had a longitudinal axis and was designed for movement. The space directed an individual's movement in accordance with the requirements of the ritual.

It can be easily be seen then, that if one wishes to alter the symbolism and image of a church building that derives from the basilica form in accordance with a new secular use, changing the major axis would have a significant effect. The establishment of an alternate predominant elevation, entrance, movement pattern and thus axis would totally alter the spatial sensation and perception of the building. The basilica form would no longer be seen as a long space framed with columns that carry the eye swiftly to the focus of the altar. Instead, when entered from the side, the typical tripartite plan of aisle, nave, aisle, could be experienced as foyer, grand colonnade, and stalls. When approached from the long side, the long nave would be seen as a collection of bays which could function more independently than the same bays when first experienced as a secondary element to the total spatial focus.

When the Puritans came to New England seeking to establish a new theocracy, one of their most symbolic acts of reaction against the

Anglican church was to reject the Gothic basilica form with its longitudinal axis, and to build instead meeting-houses which were rather square in plan or had their main entry on the long side and the pulpit and major focus at the other end of the short axis from the main entry. They were able to see the effective image alteration such a simple axis change would make. They were also practical folk, and as with all early Protestant religions the emphasis in their services was on preaching, not ritual, so, the choice of the square with a non-axial hipped roof or the placement of the pulpit on the long side of the oblong space, thus bringing all the worshippers closer to the speaker, also reflected the change in use of the religious gathering place. Although by the beginning of the 19th century most new church buildings had reverted to the traditional entry under the gable with the pulpit at the other end of this axis, the structure became only minimally rectangular. The vestibule and stairways to the galleries usually occupied the added longitudinal bays so that the auditorium space itself remained almost square.

This was the form to which inventive builders applied the Greek porch or temple front. It was also applied to banks, town halls, colleges, state-houses, customhouses and private houses. The temple front by itself does not signal "church." When the temple front is combined with a graceful high reaching spire and an almost cubic mass pierced with three story windows, then a remarkably coherent message is proclaimed.

As both Bruno Zevi[33] and Vincent Scully[34] have pointed out, the Greek Temple was designed primarily as an exterior, as an ordering element in the landscape. This was where the altar was found and often, this was as close to the temple as the worshippers were allowed to approach. The interior was for the priests and a statue of the god, to be glimpsed through the screen of columns.

In making an argument for the preservation of urban churches based on their contribution to the urban whole, it seems crucial that we reconsider the outward focus of the original temple front.

In converting a Greek Revival or other Attic inspired church building to a secular use and trying to change the image of the building to reflect its new use, a way should be found to separate the three major elements which when combined form so powerful an image. The spire should speak of the sky, the meeting hall should speak of shelter, and the temple front should speak to life on the street. The temple front should be made to emphasize its role as the backdrop to ritual.

Camillo Sitte[35] recommends using major institutional buildings as "backdrops to a stage." He includes churches in this group. He suggests that a plaza in front of a church facade be arranged so that the facade is part of the urban wall and the plaza spreads from it in a theater-like fan. In neighborhoods where open space is plentiful and the churchyard is not an important amenity, the most effective way to separate the three image-generating elements of the Attic inspired church would be to imbed the church in the urban wall as suggested by Sitte. Depending on the setting, either a plaza or a literal stage could then be designed in front. The relationship between the parts would then be a new one and thus the image would be changed without physically removing anything.

The church steeple, the third element of the image of Attic inspired churches, is a major part of both the landmark quality of a church and its image. While many other building types have towers, no others have the tall slender spire designed for bells rather than for people. The steeple has been seen as such an important element of the image of a church, that it has survived several major stylistic changes. The stee-

ple is actually a medieval element that was interpreted with classic orders and arches during the English renaissance. This English tradition was brought to the American colonies where it was an important element in Georgian, Federal and the subsequent Greek Revival styles. It was later revived in something like its Gothic form by major church architects like Richard Upjohn and Ralph Adams Cram.

The steeple plays an important role in giving the church a landmark quality. It usually has both rich, distinctive detail and a clear and coherent form that contrasts with its context. The church steeple springs directly from the ground, as in the case of the medieval tower, or is placed almost directly above the pediment or near the front of the church. In either case it not only marks the building in the landscape, but also marks a landmark section of the building such as the entry or the crossing. Regardless of the style of the steeple, it usually rises in clearly separated stages making it more like a classic column than an obelisk or pyramid. While generally the most monumental element of a church building, and often an entire landscape, the steeple remains comprehensible in scale. From a distance, the simple pointed form of the steeple makes it stand out from the background. From the near ground, near its base, its segmentation explains its growth towards the sky while its pointed form exaggerates its perspective and makes it seem taller than it is.

Thus, a church steeple can be seen to be both an important aspect of the landmark quality of the church and of its image. Such a contribution to the liveliness and comprehensibility of the urban landscape is a major reason for preserving a church building even after it has no congregation. However, the steeple is also a major part of the image that causes a church to be read as a church. It has been so important as

an element of church design that in surviving several major stylistic changes it has become an important symbol in producing an image. In converting a church to a secular use and trying to give it a new image, it would be highly effective to obliterate the steeple. But, to remove it would also remove one of the major reasons for attempting to reuse the church. The designer, in converting the church and its image to a non-religious function, must look to other elements of the building and make such radical changes there that the religious image is erased while the steeple itself is retained.

The focus of the medieval basilica derived church was primarily on the altar, but the architecture and especially the interior layout of subsequent church buildings has reflected the seesawing of Protestant sects, and the reform and counter reforms of the Catholic church concerning the issue of the primacy of the altar and ritual of the pulpit and the word. Numerous analyses of medieval cathedrals have described both the simple basilica and the cruciform type as a space designed for movement and irregular crowds. Processions involving the entry of the bishop and his entourage, movement of the worshippers towards the choir to take communion, and related rituals focus in a longitudinal axis on the altar. However, even when ritual was of primary importance, the axial movement focussed on the altar was not the only pattern suggested and supported by the space. Visiting the stations of the Cross, saying prayers and lighting candles at individual shrines located in the chapels along the aisles and the ambulatory of the choir suggest movement that is more circular than axial.

When the preaching of the word began to grow in importance in the Protestant sects and services became longer, pews or benches were introduced as permanent fixtures of the space and the spaces were designed to be

much less dynamic. The divided opinion on the relative importance of ritual or sermons in worship has created interesting spatial effects in many churches. Many churches solved the altar/pulpit dichotomy by retaining the altar in its central location and placing the pulpit to one side of the nave, forward of the altar and, to improve visibility, several steps above ground level. Since the pews remained facing the altar, the geometry established by offsetting the pulpit is merely virtual and visible only when the chruch is in use and all the worshippers are turned in their seats to hear the sermon or homily, creating a human diagonal set against the orthogonal geometry of the building.

In more radical sects the preaching of the word was given equal importance with the celebration of ritual. But propriety would not be served if the minister delivered his sermon while standing on the altar or communion table. The problem was usually resolved by placing the pulpit immediately behind the altar or communion table and several steps higher than it. Since the program of worship in these churches did not require the congregation to move to the altar, large galleries could be built to bring people closer to the speaker. These galleries were often built in a U around the perimeter of the church. The pews in the two arms of the U were usually placed facing each other, not the front of the church. The pews under them, on the main floor of the sanctuary face the front of the church. In this situation several geometries are created which could be exploited by the conversion designer. The three directions established in the galleried church could be used together for maximum impact. The first of these is the fan-like virtual geometry of the worshippers turning in their seats towards the central pulpit. The second geometry that can be heightened in order to capture the spirit of the space is the geometry created

by the lines of the pews running the width of the building on the ground floor contrasted with those running along the length of the building in the galleries. In order for these two directions to contrast effectively the vertical communication between the two levels must be carefully designed. If these two geometries are made strong enough the focus on the location of the former altar/pulpit can also be maintained as the overall or ordering element. If the site allows it, the former altar location could become the entry or if the entry has been moved to the short axis or left in its original location, it could become a two story atrium space.

With the two types of halls seen in churches, which could be classified as the simple basilica and the lecture hall, there are, then, two possible organizing forces: movement or geometry. While the main movement suggested by the basilica is down the center of the length of the space, a secondary circular path is also suggested. An effective way to alter the image of the building while maintaining its essence would be to accentuate the circular path around the perimeter. This could be done in conjunction with an overall axis change like that suggested earlier in discussing the original uses of the basilica form, or it could be used to de-emphasize the remaining longitudinal axis by giving both patterns equal weight. In the second type of hall where movement is not a major part of worship, geometry becomes the organizing force. The spirit of the building can be exhibited by playing with these geometries in several combinations. These various geometric combinations or movement patterns need not remain within the walls of the original church building.

The windows of a church building are another important part of its image. In a standard American neighborhood church they are about three stories tall and very grand. Such handsomely large

detailed openings in walls are rare in daily life. Piercing the walls in rows of 3-6 along the long side of a building, they clearly announce the building type and the space that is inside. If the original church windows are not in good repair, the windows should be regarded as repetitive openings in the walls. They furnish the opportunity for the heightened geometries just suggested for the interior of the space to escape the bounds of the existing structure. Pieces of the diagonal geometry can become bay windows making the wall more three-dimensional. The vertical communication between floors to heighten the contrast suggested between the longitudinal and transverse geometries of a galleried church building can be achieved by bay windows also. In a reverse interpretation, the wall with its grand openings can be treated as an arcade. The circular movement suggested by the basilica plan could occur in a new zone created between the existing wall and a new weather skin built within the structure.

Regardless of whether the windows are treated as bay window frames or as arches in an arcade, every attempt should be made to save a complete sense of their full height. If the subdivision of the church building into additional floors in unavoidable, it should be done so that the geometry or movement of the space is experienced on all floors. On the exterior the use of projecting bay windows could preserve the verticality of the windows more effectively than spandrel panels inset in the existing openings. The verticality is emphasized and the image of the building is changed.

The windows of a church building are an important part of the whole color scheme for the interior of the space. In Medieval and Byzantine inspired buildings the rich colors of the stained glass were designed to work in harmony with the dark brown paneling and trusses or with warm stone work and a ceiling often painted a deep blue and sprinkled with stars to produce a dark interior filled with mystery. Spots of brighter light are used to focus attention. In Attic inspired churches, the large windows galzed with many small panes of clear glass were intended to shed a bright glittery light on a predominantly light interior. Sometime, probably in the early 20th century when the neo-colonial and thus Attic aesthetic was very popular, many Medieval Revival churches were painted uniformly white inside - no more rich brown woodwork or starry ceilings, no more mystery.

Although the following suggestion may seem paradoxical, it would be reasonable, in trying to give an old Gothic Revival church building a new image, to restore its original color scheme. Combined with a complementary lighting design, that might involve focussed track lighting, the resulting impression would be of the total effect, not the individual symbolic elements. Properly designed lighting would take the focus from the altar area and any added elements such as plush wall-to-wall carpeting could either reinforce the deep brown of the woodwork or pick up one of the rich dark colors of the stained glass. The addition of the plush carpet and similar items foreign to the original church furniture in colors that make them appear to belong would be very effective in incorporating elements formerly symbolic of church in a new whole.

The old and the new could be entirely complementary, not in collision. In taking this approach it is necessary to be wary of imitating the old in the new or neo-revivalism. The modern

must always read as such and the old should not be disguised. The juxtaposition of the two must be maintained, it is collision that is to be avoided. The old can be enhanced by being restored to a former or original state. In so doing the image can be substantially altered for the current users since they never associated its new/old decor with "church." In this way the formal qualities and craftsmanship of the original designers can be appreciated while another layer of careful design is added.

CHAPTER 5
LOOKING AT CONVERTED CHURCHES

The purpose of this investigation has been to develop a series of criteria to use as a framework in designing a church building conversion. It has also made some broad suggestions about how to implement decisions made according to the criteria established. Since the process that starts with a worshipping congregation in the church building and ends with a thriving new group of users in a new version of the same building involves several groups, this discussion has not been limited to purely formal or spatial considerations. The success of a church building conversion is as dependent upon careful programmatic considerations and finding an appropriate use as it is on purely formal and spatial sensitivity.

The beginnings of a productive approach to the redesign of a church building come from a thorough understanding of why the building should be reused rather than demolished. The first criteria established in this discussion dealt with the preservation or enhancement of those qualities of a church building which make it worth saving. These qualities included: the contrast in size and scale between a church building and its surroundings; the subtly modulated and detailed multi-storied interior space; the

traditional semi-public nature of the place; and the importance of a church building in providing temporal context for the urban environment.

The first feature of a church building that makes it an important part of the urban environment is its size and scale. The building is usually larger or smaller than its neighbors. This contrast in scale causes the building to be a dramatic element in the streetscape and to play an important role in the cognitive organization of the city in the minds of the inhabitants and visitors. The successful conversion of a church building must include significant effort to preserve or enhance the role of a building in its urban setting.

The interior of a church building also contrasts with the daily environment. The craftmanship exhibits a level of care and provides a sense of scale that allows the visitor to feel a sense of belonging in the whole space. At the same time the detailing often provides subtle perspective effects that make the grand space slightly mysterious and unique in daily experience. Some qualities of a church interior that require analysis are not built. These are the patterns of use that have established a geometry or axis. Longitudinal or circular axes of ritual or movement and fanlike or diagonal geometries are all created by the people who have worshipped regularly in the various spatial types of churches. These qualities of the space can be the organizing force behind any necessary subdivisions of the church interior and thus be given physical form. While the grandeur and detailing of the interior are the reasons for saving the space, this further analysis is needed to suggest methods for enhancing these qualities.

The windows of a church building are another element that needs to be studied in order to preserve the important qualities of the interior space. The windows serve two functions that must be evaluated when a church building is being

converted. They allow light to enter the space giving it either a colorful, yet shadowy aura, or a sparkling brilliant light. They also are usually multi-story and one of the primary elements that provide the space with a strong feeling of verticality. Accenting the multi-story windows through some sort of built change can contribute to both the enhancement of the unique qualities of the interior space, and the formal and cognitive role of the church in the urban environment.

Many urban churches, while still churches, are only open during worship services and have lost their

traditional publicness. When deciding on an appropriate use and writing the program for the new functions, the public quality of the place, or at least a part of the place, should be reintroduced or preserved. Architecturally, every effort should be made to make the converted building proclaim its publicness without losing all the feeling of peacefulness that was also once characteristic of the place.

The criteria for church conversion just discussed have had as a primary goal the enhancement or at least the preservation of the qualities that make a church building important in the urban envi-

ronment. A successful conversion of a church building requires more than this. A truly successful conversion results in the creation of a place that was clearly once a church building; but, just as clearly, is one no longer. The building must look like more than a preserved church with an alternate use installed to help defray the upkeep expenses. It must also look like more than a temporary home for some group short on funds that hopes to move out as soon as it can afford it. When the building reads clearly as a new old building, with the past serving as context for the present, the fourth reason, a need for temporal context, for adaptively reusing a church building has been achieved.

In order to make a church building serve as context for the present, to allow it to be more than just an abandoned building, the designer must consider the image of the church building. The designer must look at those elements of the church building that are clearly symbolic of church. On the exterior these elements include the long narrow basilica form with the gable end facing the street, or the Attic inspired porch and steeple, and the multi-storied windows. On the interior these elements include the dominant axis, the quality of light and the furnishings. Once the designer has recognized the symbolic elements of the church building he should deal with them in such a manner that they no longer work together to spell church. His treatment of these elements should be guided by a desire to preserve their formal characteristics and the role of the church in its urban setting. The suggestions made in this discussion for the enhancement of the valuable contributions of a church building to the vitality of the cityscape should be implemented in such a way that the past and present are brought into a proper relationship.

In the course of this discussion, in analyzing the spatial, formal and image-producing characteristics of

a church building, three categories of basic spatial types have evolved. The three categories are based on historic sources, use patterns and proportions of the space. They have helped to make a formal analysis possible allowing classification of the array of spaces that have been labelled church buildings according to characteristics other than their overall image or building type label, "church building."

The first of these categories is the Medieval Revival Church building. The Roman basilica is the ultimate source for this space. As the spatial type has evolved and been interpreted in vernacular American church architecture, the nave or sanctuary is twice as long as it is wide. Sometimes the type includes side aisles with a lower ceiling height than the nave. There is usually a chancel, choir or apse located at what in medieval times was the east end of the nave. The detailing of the building is usually in rich subdued colors, the arches of the windows and doors are usually pointed. Although, various Romanesque styles are included in this category, the pointed arch is not that universal a characteristic.

The second category of spatial type is a variation of the simple basilica form that is uniquely Christian. It is also Medieval Revival, in an historic sense of the word; but, because of the new axis it introduces to the spatial organization of the simple basilica, it has been placed in a separate category. This second type is the church building that is cruciform in plan. Most of the examples in this investigation have only very short transepts crossing the nave just before the former location of the altar, but the transept is important becuase of the secondary axis that syncopates the movement through the space or suggests a second entry.

The third category is called Attic Inspired primarily because of the classical detailing with which it is decorated. Despite the contra-

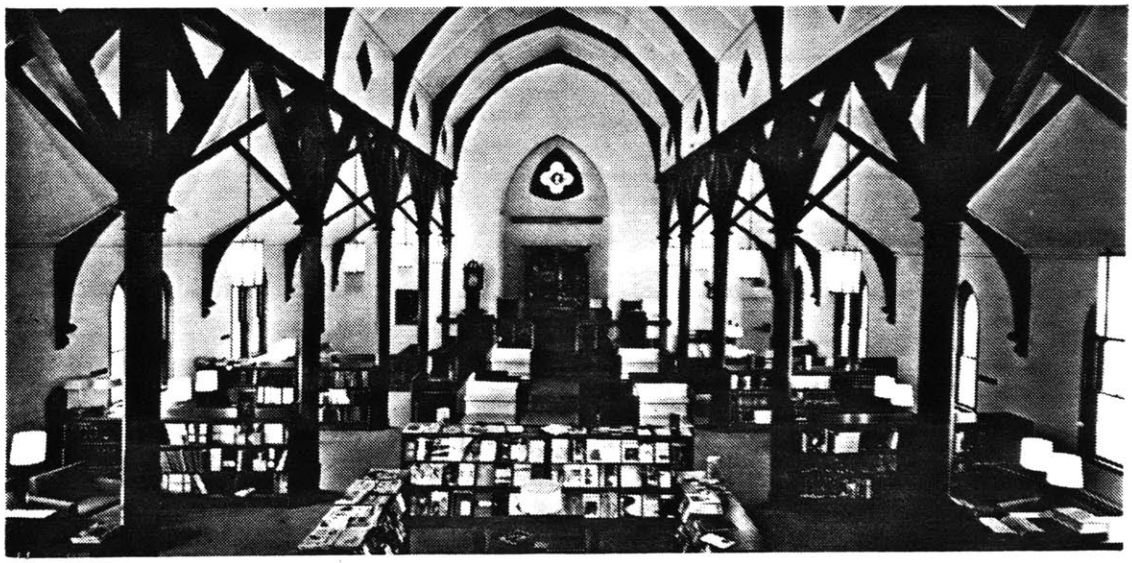
diction with the label this detailing is usually white. The actual worship space is an early 17th century Protestant invention. Partially in reaction against the image of the Catholic basilica form and partially as a result of practical considerations stemming from a new attitude towards worship, the sanctuaries, or worship spaces of the church buildings categorized under the heading of Attic inspired are almost square. In order to bring as many people as close to the pulpit as possible these buildings often have extensive balconies.

The fourth category is a variation on the third that reflects somewhat the stylistic trends during the Eclectic years in this country. This category is called Composite and includes those church buildings that are almost square in plan yet are Medieval in detailing. As will all good rules and systems, there are exceptions to this method of organizing the converted churches in this investigation. In the course of looking at actual buildings and not just developing theory, buildings were discovered that were basically Medieval Revival buildings but had extensive balconies, or buildings with Attic inspired plans and Medieval Revival detailing all painted white. Such contradictions were usually categorized according to their plan type. When a building was two thirds as wide as it was long, it was classified according to its detailing.

A second level of spatial organization was also found that had the potential for influencing the adaptive reuse of the building more than the original use. These were the urban churches that reacted to a small site and large program by putting the church social hall in the basement almost a full story above ground and putting the worship space on the second floor. The worship space was usually reached through a ground floor vestibule with grand stairs rising in each corner. Since the revivalist impulse worked to keep the exterior image and thus proportions more correct than the interior porportions,

the result was usually a less vertical worship space.

As can be seen from the matrix which follows, a particular spatial type did not seem to dictate or suggest a single type of adaptive reuse. With the exceptions of the case studies which will be discussed in the following chapters, the conversions seemed equally successful. Each had major faults, but each showed interesting examples of sensitivity, imagination, or juxtaposition, as well.

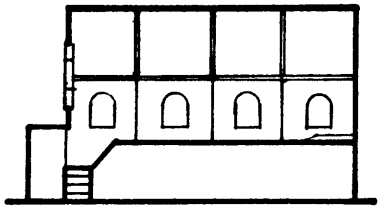


FORMER CHURCH BUILDINGS STUDIED

SPATIAL TYPE / NEW USE	MEDIEVAL REVIVAL	CRUCIFORM	ATTIC INSPIRED	COMPOSITE
EDUCATION CENTER	STUYVESANT HTS CHRISTIAN CHURCH BROOKLYN, NYC	EDEN INSTITUTE PRINCETON, NJ		
COMMUNITY CENTER	U. DELAWARE STUDENT CENTER NEWARK, DE		PEABODY HOUSE SOMERVILLE, MA	ELLIS MEMORIAL SOUTH END, BOSTON, MA
HEALTH CARE CENTER			NORTH END HEALTH CENTER BOSTON, MA	
MULTIPLE RESIDENCES		*		BERKELEY CTR SOUTH END, BOSTON, MA
LIBRARY	WESTBROOK COLLEGE LIBRARY PORTLAND, ME			
THEATER	CHOCOLATE CHURCH BATH, ME	MEMORIAL HALL HARVARD U. CAMBRIDGE, MA	CHARLES PLAYHOUSE BOSTON, MA	
COMMERCIAL	DANE DECOR DOWNINGTOWN, PA		MIXED USE SOUTHBRIDGE, MA	LITTLE JOHN'S RESTAURANT ATLANTIC CITY, NJ
OFFICES			* *	
DANCE HALL	PHOENIX DISCO PORTLAND, ME			EDUCATIONAL CTR FOR ARTS NEW HAVEN, CT
MUSEUM			AFRO AMERICAN HISTORY MUSEUM BOSTON, MA	

* Multiple Residences in a Cruciform Building	* * Offices in an Attic Inspired Building
HILL CONDOS BOSTON, MA	CHAMBER OF COMMERCE PORTLAND, ME
TOWER CONDOS CAMBRIDGE, MA	TOWN HALL ABINGTON, MA
ST MARK'S SQ. BROOKLINE, MA	CHARLES ST MEETINGHOUSE BOSTON, MA
	POLICE STATION NEWARK, DE

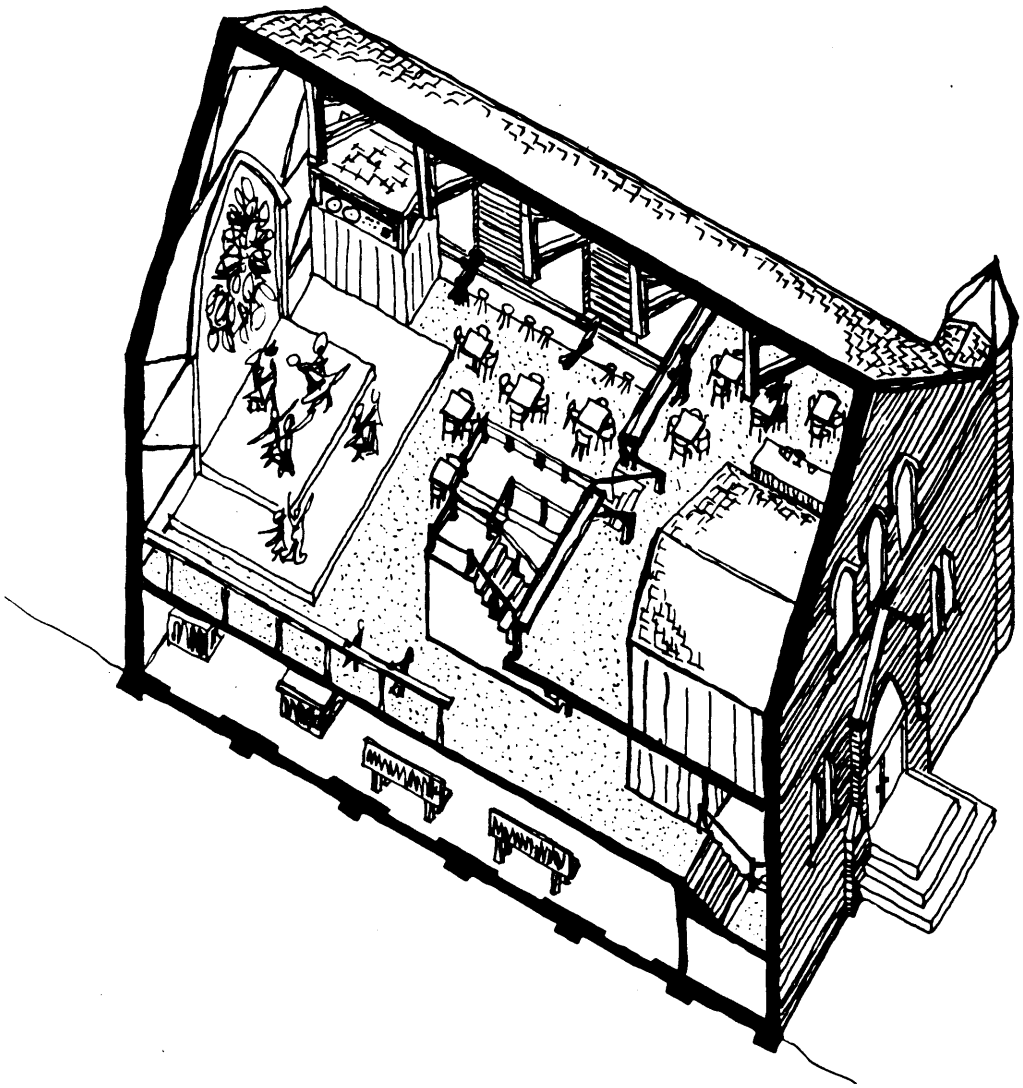
CHURCH BUILDINGS w/ MAIN HALL on SECOND FLOOR

	Medieval Revival	Cruciform	Attic Inspired	Composite
Community Center			PEABODY HOUSE	ELLIS CENTER
Health Care Center			NORTH END CTR	
Multiple Residences		HILL CONDOS		BERKELEY CTR
Theater			CHARLES PLAYHOUSE	
Commercial	DANE DECOR			
Offices			CHARLES ST MEETINGHOUSE	
Museum			AFROAMERICAN HISTORY MUSEUM	

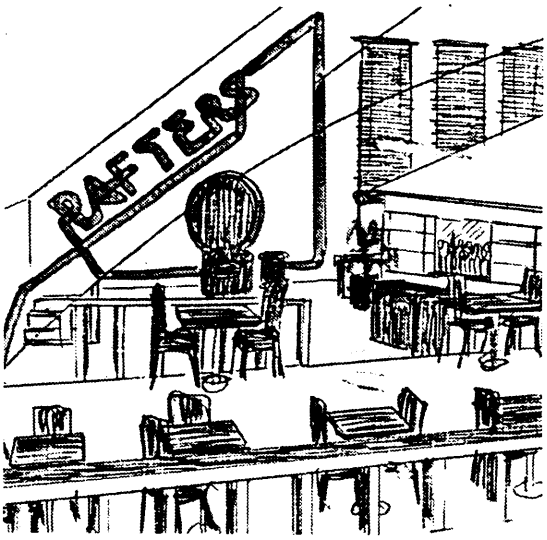
CHAPTER 6
CHANGING THE IMAGE, NOT THE PLAN; AND VICE VERSA

The Phoenix Disco in Portland, Maine is one of four churches in the study that are of particular interest because they have capitalized on the anecdotal quality of their Medieval Revival buildings. Rather than attempting to enhance the purely formal or spatial qualities of the buildings they were recycling, the designers of the conversions of these places chose to heighten the symbolism associated with the style of their late-19th century Medieval Revival buildings. Robet Venturi[36] has listed heightened symbolism as a characteristic of a "pleasure zone." Among the places Venturi describes as "pleasure zones" are Marienbad, the Alhambra, Xanadu, Disneyland and Las Vegas. The other qualities important to the development of a "pleasure zone" as seen by Venturi are lightness, the quality of being an oasis in a hostile context and the ability to envelop the visitor in a new role.

The Phoenix meets three of these four characteristics. The designers concentrated on heightening the symbolism of the place, in so doing they also strengthened the quality of the place as an oasis. The dance floor is framed by the chancel arch and the music-synchronized light show is projected on



a screen set into the arch. The light show is designed as a kinetic stained glass window. The windows of the nave have been bricked in with care so that the pointed arch remains prominent and the bricked windows are in relief with the plane of the wall. The mezzanine level of the disco which was added as a bar is in the traditional location of the church balcony. The designers guarded the formal elements that spell "church" for their image-generating quality, for their symbolism. They have avoided sacrilege through their choice of materials that makes everything just a little off; but they have maintained enough of the sense of "church to provide



the sense of an oasis from the work-a-day world.

The designers of the disco were not content to merely offer the image of the church as the only opportunity for escape. There are also two bars in the disco offering a choice of images. On the main floor, under the mezzanine, one finds a cedar shake sided bar with a low ceiling of exposed heavy timber beams--escape to a cabin in Baxter State Park. Upstairs in a back corner of the mezzanine is a second bar. This one boasts Sidney Greenstreet chairs and slow moving horizontal fans hung from the roof--escape to Casablanca. This upstairs bar plays on the original exposed trusses by being called "The Rafters" --escape to Grandmom's attic where no one can find you. The eatery in the basement of the building is called the Oak Street (the address of the disco) Subway Station, and sports metro cars painted on the wall. Since Portland has no subway system, a snack in the "waiting room" can transport you to the major western city of your choice. By offering several places for escape, the proprieters have given the guest ample opportunities to become enveloped in a new--albeit temporary--role.

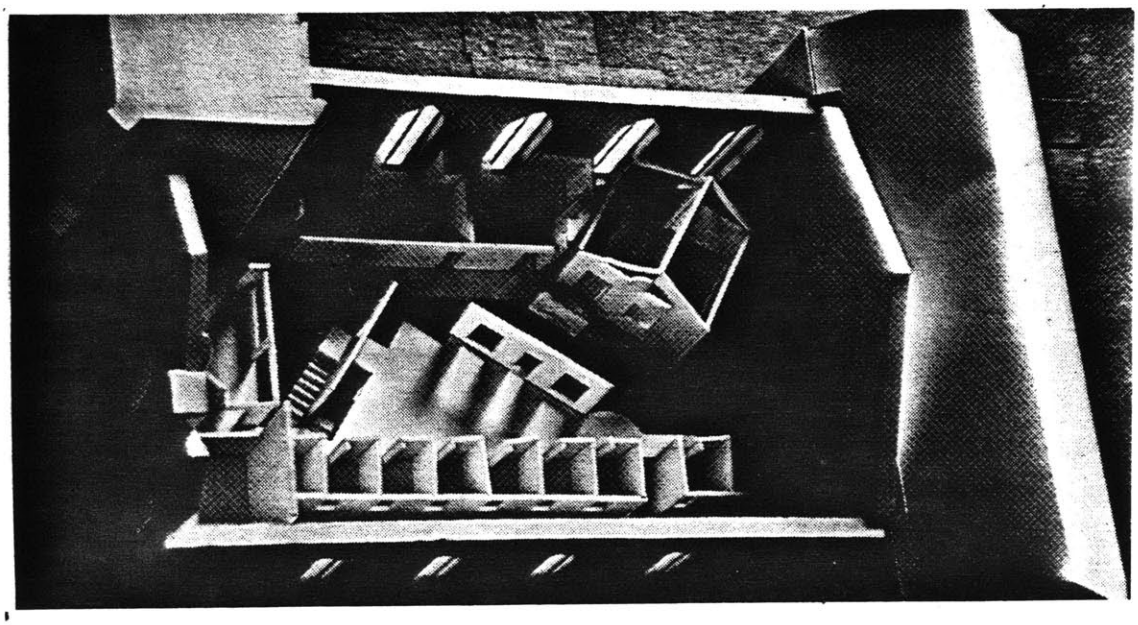
The manager readily agrees that by putting the

disco in a building that stood out from its neighbors in scale and image, the proprietors have created a "disco gimmick" that helps the success of the disco. People remember the disco when they hear of it because it is the "disco in a church." People come there to dance for the first time because they are curious. But, most importantly, they return and tell more people about it because it works.

Peter Waldman, in designing a school for autistic children in the nave of a church sought to preserve the symbolic church and give it equal weight with the symbolic elements he adds to the nave to make a new environment for the school. The autistic child is not really understood and there are several approaches to treatment. It is generally believed that autism is brought on in early childhood by a child's fear of imminent death. The young child is so frightened by his envivonment, that he feels he must concentrate all his energy on avoiding death. He uses a number of mechanisms in what he believes is his moment by moment struggle for existence. These mechanisms are manifested in what are seen as the symptoms of autism.

An important step in the treatment of autistic children is the creation of a new total environment. The child's experience with his first environment left him in mortal fear. In order to bring him out of this fright, a new physical as well as human environment needs to be provided. This environment must be complete so that it will seem secure; yet; it must bear some relationship to the real world so that the transition to this world will not reinforce the fear that the treatment is seeking to dispel.

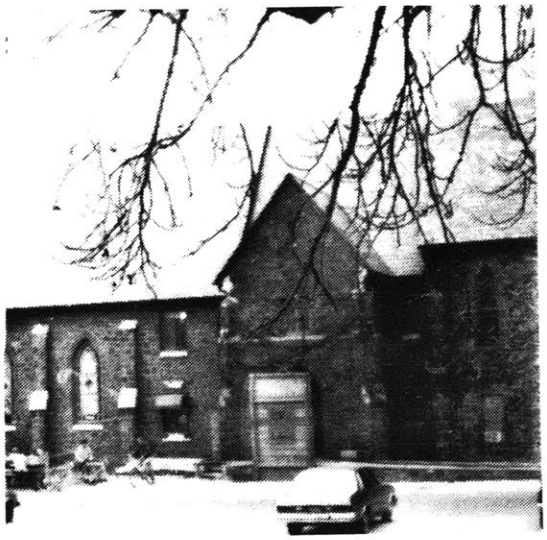
Peter Waldman's approach to providing a new and complete environment has been quite literal. Within the thick stone walls and high vaults of the church he has built a child size school

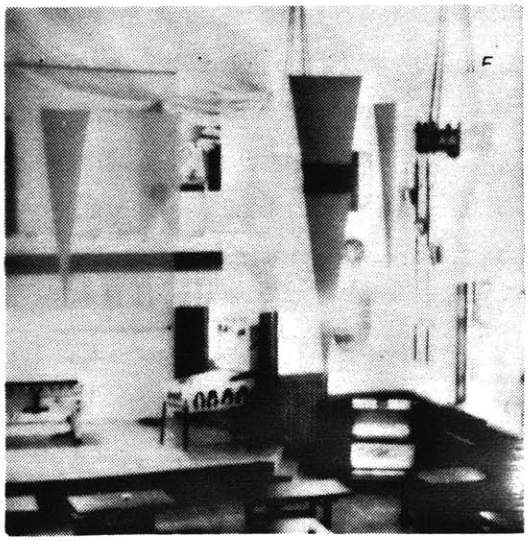


building and house. He has carefully cut the new construction away at the original stained glass windows so that they remain a part of the total envelopping space. The stained glass windows filter out the real world, and their patterns and color are an important tool in creating a unique world within the church.

It is not clear whether the facades of the little buildings within the existing structure will successfully read as the types they are intended to represent. Nor is it clear that autistic children associate with literal building images. What is important is the concept, expressed so strongly here, of a high vaulted space as an all encompassing world. This was the intention of the original medieval cathedrals, with their three dimensional entries and statues in niches designed as small buildings within the larger whole, expressing a hierarchical world order. And, this was Peter Waldman's intention in the redesign of this rural medieval revival church building.

The center for non-resident students at the University of Delaware is definitely an oasis in a desert of cars. It is surrounded on three sides by two city blocks of parked cars. Its fourth side fronts on the





main street through town. The original building was built in two stages. Both sections are stone Medieval Revival structures. The support spaces behind the original sanctuary serve as a link to the later social hall addition.

The front doors through which the congregation once entered the sanctuary from the street no longer have exterior doorknobs. This is the only indication to the pedestrian that the main entry has been moved to the link between the former social hall and the sanctuary. The converted building is designed for approach by car; it is designed for the commuting student. From the parking lot, the driver sees a raised neo-medeival drawbridge and a wheelchair ramp in front of the new main entry. Immediately to one side of the entry he sees an ice cream take-out window with a crenelated canopy. The ramp seems more effective at signalling entry than the raised drawbridge, which traditionally says "no passage." The take-out window canopy and the drawbridge signal the beginning of a whimsical collage of medieval romance that continues inside. Inside, the visitor finds all the signs lettered in a stylized Old English script, including the restrooms labelled "knights" and "damsels." The former church social hall, now student social hall, walls sport murals of dragons, castles,

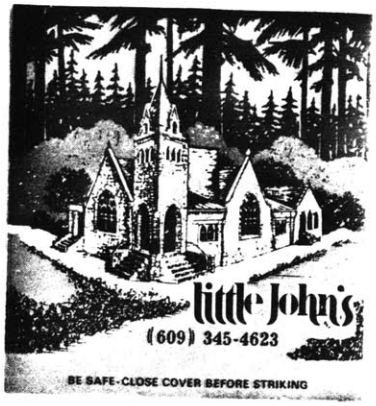
shields and maces. Banners are hung from the high arched ceiling and a cardboard cut out of Rapunzel lets down a long hank of braided yellow yarn from a window above the stage. The early 20th century stained glass windows let in cheery pastel light but not the view of the parking lots. The escape is complete. A "pleasure zone" has been created.

The former sanctuary is a study hall, no escaping reality here. The floor is covered with a heavy duty gray beige carpet with no pile. The furnishings are all spindly, minimally upholstered modern, placed in orderly rows and at right angles. The modern painted aluminum light fixtures are hung within a few feet of the study tables leaving the high arched ceiling in shadow. Despite the almost entirely eggshell walls and ceiling, the sanctuary/study hall seems to have captured the feeling of a monastic copy room of a very ascetic sect of monks. If even the simple imagination that was seen in the social hall had been used to develop a non-escapist formal delight in the study hall the conversion of this church building would have been more successful. Nonetheless, the lack of imagination displayed in the conversion of the sanctuary to a study hall results in a hall which is more pleasant than a study hall which might have resulted had the same level of thought been applied in designing an entirely new student center.

The final example of a Medieval Revival church building redesigned through heightened symbolism as an oasis or escape from reality is a restaurant in Atlantic City, New Jersey called "Little John's." The name indicates its obvious symbolism. Its trademark is "Eat, Drink and be Merry." The drawings on the matchbook covers show the restaurant in the middle of Sherwood Forest. Through a fortuitous accident, in terms of image alteration, the interior plaster has been removed and the stonework has been exposed. Although con-

verted historic buildings with exposed stonework or brick-work have become very cliched, in this case it is very effective in heightening the rustic atmosphere that suggests a manor hall in the medieval woods of England.

The building is interesting as a spatial type. Although it is rural English medieval in materials and detailing, it is unique in plan and massing. If it weren't for the clearly English styling, the sanctuary could fall into the category labeled Byzantine-inspired in this discussion. However, it is clearly an invention of the original designer dealing with a corner site, the requirement of the Protestant sect for an equilateral form that retained some axial focus, and a general multi-gabled medieval feeling. In massing he solved the problem with an almost regular cross of steep gables set in a square with low hipped roofs at the four corners. This massing is expressed in the interior as an actagonal



sanctuary with vestibules at the three corners on the street.

The original designer was not a purist. He has added a small extra gable projecting from the side of the octagon under which one found the pulpit. The site was not square so he made one of the arms of the cross almost twenty feet longer and crossed it with a steeply gabled church hall. The result is a church building without a standard form or plan and an orderly yet irregular collection of gables that is easily converted to a non-church image without destroying the formal functions of a corner church in ordering the urban environment.

If for any number of reasons, either valid or merely avaricious, a church building is torn down, is the loss made any less acute if an isolated portion of the building is saved? Such a mixture of old and new could be said to allow the layering of time thus giving the neighborhood a temporal context. The section of the building that is saved could be that part that plays the most important formal or cognitive role in the streetscape. Or, it could serve as a gnomon that marks a place where many people celebrated important events in their lives.

These three possibilities can only be realized if the

juxtaposition of old and new is done very sensitively. In order to provide the proper relationship between old and new the sections of the church that are saved must be those that can provide a framework for the new construction. The saved section of the church building should not have an object quality in relation to the new structure. If it does the proper relationship between old and new is not preserved. The saved former church building pieces become more like a deformed side show attraction or gimmick rather than context and setting for the present. There would seem to be a critical mass of saved old structure necessary to be effective in providing framework or context.

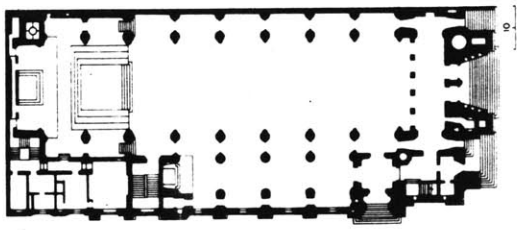
While a tower is an effective formal element in marking and resolving a direction change at a street corner, the directionality and scale of the two main facades that meet at the tower are just as important in syncopating the rhythm of the street. The church tower alone serves the same partial landmark function as a tall building. In order for the tower to have its full impact it must be complemented by other pieces of the former church building that introduce a change of scale at the street level.

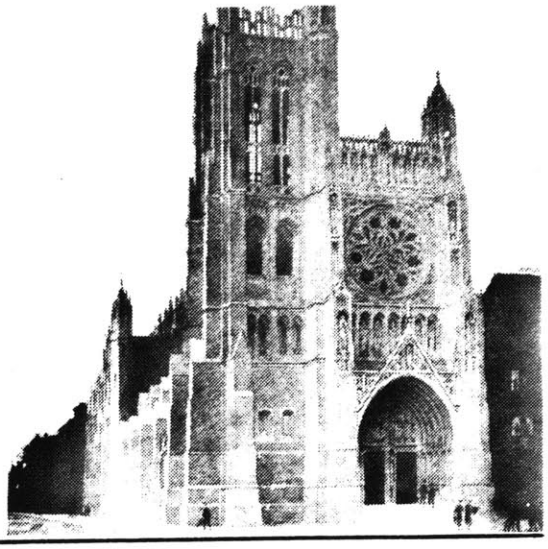
If the selective demolition of a church building is not done carefully enough, the collective memories that will be recalled by the preserved pieces will be those of the grandeur that has been lost. The memories will not be those of thanksgiving, weddings or even quiet good-byes. The preserved pieces of the former church building will stand on the street looking tortured and abused. It will bring pain to the passerby rather than reverie.

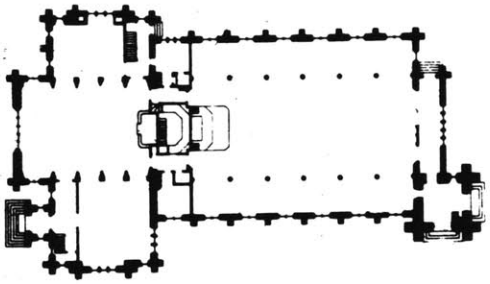
The next three buildings in this discussion are also examples of a concentration on the issue of image and spatial modification in a traditional building plan. They are not church conversions, in the sense discussed thus far, however. These medieval revival buildings retain the image of traditional medieval plans, yet the interior spaces have been rearranged to meet different use requirements. The spatial modifications of these buildings remain primarily within a prescribed shell and thus are not fully applicable to the goals listed in this discussion. They do, however, provide helpful suggestions for interior spatial changes that preserve the qualities of the space.

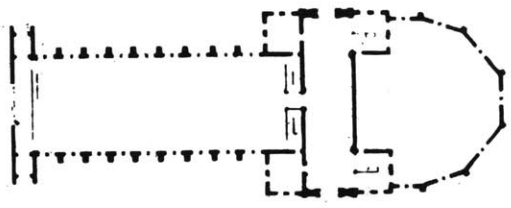
The first example is St. Thomas' church by Cram and Goodhue in New York City. The site is on the corner of two major city streets. The architects chose a richly carved cathedral style of Gothic architecture as befitting a downtown church in a major city. In response to the requirements of its formal role as a corner church in an urban setting they varied the traditional symmetrically organized plan of the medieval cathedral by giving the building only one tower. They also acknowledged its dense urban setting by designing the building so skillfully that the image of the building as a copy of a genuine High Gothic church building remains undisturbed while the urban environment benefits greatly from the changes.

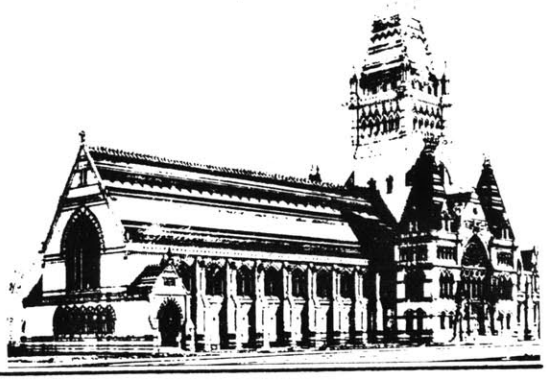
The alterations to a traditional interior were made just as skillfully. The asymmetrical plan that results from the changes in the exterior massing are not experienced in the interior. The nave is majestically axial and central in feeling. The worshipper is not even aware that two floors of parish offices are nestled beside the choir. The third floor of the office piece of the church is a galleried continuation of the triforium of the nave. The interior is experienced as a simple











basilica with aisles on each side and a shallow rectangular chancel. From the exterior, the massing of the building makes it appear to be cruciform in plan. Only from an airplane would one be aware that the plan is a simple rectangle.

Another church with a traditional Gothic Church image and a modified plan is the Old Cambridge Baptist Church. The exterior of the church building gives the building the image of an English Gothic cruciform church with a square chancel and two short transept arms. The building does have a cruciform footprint; but, even in the original design the building was subdivided to meet contemporary biases and use requirements. When the building was first built, the church worship space was limited to the nave. The altar space was in front of a partition crossing the nave one bay before the transept. The chancel was used as a small chapel. One arm of the transept was a classroom and the other was a social hall. After a fire in the late 19th century, the chancel was refurbished as a parish hall, the smaller transept arm as a vestibule and the larger as a small chapel with its own entry. Today, the traditional east end of the church has been further subdivided into rentable office space and meeting rooms. The spaces that have resulted from the shortening of the worship space are more convenient for a Protestant sect, allowed the 19th century impulse of the Ecclesiologists to separate sacred and profane uses to be accommadated and are still pleasing in proportion and unusual in day to day experience.

The third example of a traditional Medieval Revival church plan subdivided and used untraditionally is Memorial Hall at Harvard. Ware and Van Brunt chose a cruciform plan with a large apse at the traditional east end and a tower over the crossing. They used this traditional cathedral plan to house a dining hall and theater. The building detail-

ing is a colorful Venetian Gothic. The plan, massing and detailing combine to produce a powerful image of a church.

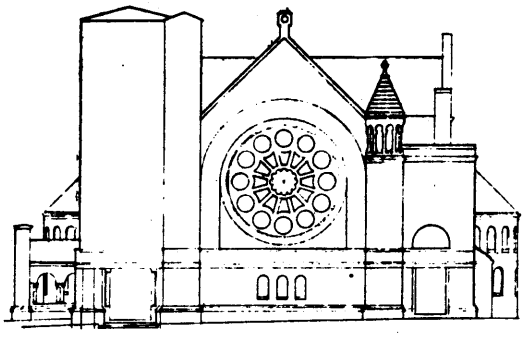
The architects have worked within the axes of the plan to design a grand entrance in each end of the transept. The entries in the traditional west end of the nave are off axis and diminutive. By changing the axis of main entry the architects have provided the passerby with a strong hint that the place may be intended for other than ecclesiastic use. The transept was designed as a monumental vestibule from which one entered either the dining hall in the nave or the breathtakingly steep-floored theater in the large apse.

Ware and Van Brunt both used the image of a cathedral for their purposes and seemed to be little troubled by the contradictions possible in using a religious image for a secular use. The building was built as a memorial to Harvard's Civil War dead and thus the religious imagery was probably a conscious choice to proclaim such a message. Beyond this imagery, the architects showed great skill in analyzing and enhancing the purely spatial and formal qualities of the place, unencumbered by problems of religious connotation.

CHAPTER 7
DEALING WITH THE NITTY GRITTY

When the developers of St. Mark's Square, a residential conversion of a former Methodist church in Brookline, first became involved with the building, it had already been vacant for several years. A neighborhood group had had it listed on the National Register of Historic Places in an effort to discourage its demolition and replacement by a ten story tower. The building's value to the neighborhood is not historical. It is neither a unique specimen of a particular style nor is it an almost perfect architectural masterpiece that could be studied as a standard of excellence. The building is valuable to the neighbors because it helps preserve a remnant of the original scale of the neighborhood which is rapidly being destroyed by a proliferation of condominium towers.

Because the building is on the National Register, a developer of the site would be unable to include the costs of demolishing the solid stone structure in his cost of construction for tax purposes. Thus, he would not be able to depreciate them. This is one of the provisions of the Tax Reform Act of 1976. Another provision of this act allows a developer who converts a property on the National Register to a commercial, or



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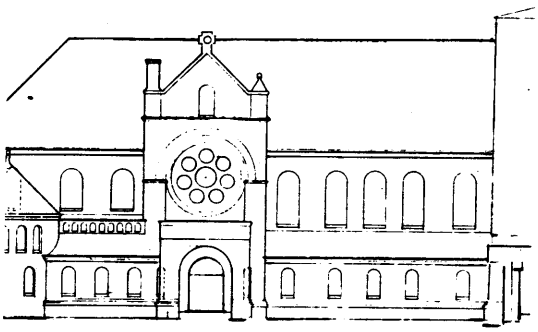

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other income producing use, following the guidelines of the Secretary of the Interior, to either amortize the costs of the rehabilitation work over a five year period or to depreciate the cost of the original building plus the construction expenses at the favorable rate allowed for a new building. It was this provision that made the project look feasible to the developers. The huge tax savings allowed by five year amortization to an individual in a high tax bracket makes finding limited partners relatively easy.

When the developers first considered the conversion of the church building to multi-residential use, there were several condominium towers near completion in the area and apartment buildings were rapidly being condominiumized. This led them to believe that the most favorable market would be in rental units. Even when they squeezed thirty-nine units into the existing shell of the building the construction cost per unit was too great to allow them to obtain an FHA insured mortgage. FHA standards are based on new construction and don't consider two story living rooms, stained glass windows, stone sculpture or a field stone lobby or a bell tower. Although the volume of space for the money was greater than that of new construction the overall costs of the bare bones conversion

turned out to be greater than that of a standard new rental apartment building with the same number of units. Thus, it was not feasible.

The condominium market has remained strong in Brookline and with the recently enacted ban on condominium conversions there seems to be a shortage developing. Thus, the conversion of the church building is currently being redesigned as sixteen luxury condominiums. The entire transept is being designed as a lobby with the possibility of windows or balconies from the units opening into the space. No floors are being added to the space under the roof leaving the opportunity for several of the individual unit owners to add lofts or otherwise customize their living spaces. As in the earlier design, spaces adjoining the rose windoes are cut back and provided with their own glass weatherskins so that a large part of the rose windows can be seen through the operable windows of these spaces and the sparkle of the light through the rose windows doesn't have to be impaired by the addition of a plexiglass storm window. Although the units designed in the first plan for the conversion were more interesting than standard new rental units, the extreme slicing of the space seemed quite brutal. The second design seems more sympathetic to the spatial qualities of the former church building.

In order to be certified as a "substantially rehabilitated historic structure" a conversion project must meet the Standards for Rehabilitation of the Secretary of the Interior. These are ten basic guidelines written in general terms to apply to historic structures ranging from mill buildings to single family homes. The guideline most frequently cited as having been violated when a project is refused certification is, "preserving the distinguishing original character of a building."[37] Since the guidelines are only very general, decisions are made

The following "Standards for Rehabilitation" shall be used by the Secretary of the Interior when determining if a rehabilitation project qualifies as "certified rehabilitation" pursuant to the Tax Reform Act of 1976. These standards appear in Section 36 of the Code of Federal Regulations, Part 67.

1) Every reasonable effort shall be made to provide a compatible use for a property which requires minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.

2) The distinguishing original qualities or character of a building, structure or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.

3) All buildings, structures and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.

4) Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.

5) Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.

6) Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

7) The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

8) Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any rehabilitation project.

9) Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.

10) Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

on a case by case basis and their tenor could gradually change with the trends of public opinion. At this point, however, the most liberal interpretation of the "distinguishing original character of the building" is the shell; the most liberal interpretation of "preserving the distinguishing original character of the building" is the preservation of the shell. The Tax Reform Act of 1976 does not allow five year amortization of any new construction that goes beyond the original foundations, walls or roof of the building. The first development proposal for St. Mark's Square required the rapid a-

mortization in order to be feasible. It was indeed certified as having preserved the building's distinguishing original character.

Not only is the interpretation of the standards of the Secretary of the Interior somewhat affected by current design thought but implicit standards of what is sensitive adaptive reuse are influenced by government standards. When government and quasi-government agencies are willing to allow and require a deeper level of analysis of the "character" of an historic building and its formal and cognitive role in the environment in its review processes, then more grassroots organizations and less sophisticated projects will improve their informal approaches and standards. It won't be until this happens that we will begin to have an urban environment richer in time and materials and more clearly readable.

Another item of a practical nature that can have a major impact on the design of a church conversion is code compliance. The restored Chapel of the Good Shepard on Roosevelt Island in New York is a case study that will demonstrate this clearly. Even though the project involved more simple renovation or restoration and the intended new use was essentially the same as that for which it had been originally designed, the major expenses in the renovation were those which were required to bring it to modern code standards for a place of public assembly.

When Welfare Island was renamed Roosevelt Island and designed as a new town in the center of New York City, there were several buildings already on the Island that were listed on the National Register. The Chapel of the Good Shepherd was one of these. It was decided to restore the building as a meetingroom-theater and make it available for use by local community groups. Structural calculations showed that the floor joists of the main floor were sized to support the code mandated 60 lbs/s.f. live load required

for a place of assembly with fixed seats. The girders supporting the joists and the cast iron columns supporting the girders were not adequate, however. Since structural work was going to be necessary anyway, it was decided to design the structure so that it would meet the code requirements of 100 lbs/s.f. for theater use or for a place of public assembly with moveable seats.

The structural improvements were designed with the intention of preserving as much of the original interior as possible. New joists were inserted between the existing joists and steel girders were used to replace the original wooden ones. Since fire exits were plentiful and both floors of the building had easy access to the street the firecode was stretched and the cast iron columns in the basement were allowed to be left unprotected. To increase the loadbearing capacity of the columns to meet the use requirements of the building code they were filled with concrete.

By the standards established in modern codes, the historic chapel was not adequately ventilated. In order to comply with the codes the area of operable window must equal 5% of the floor area for a place of assembly. Even if the existing stained glass windows had been made fully operable they would not have provided adequate ventilation. If the historic shell were to be maintained, a mechanical ventilation system had to be installed. The mechanical equipment was installed in the bell tower and the new ductwork was concealed under a hung ceiling in the basement which also served as fireproofing for the new steel girders supporting the main floor. The bell was remounted on a stand in the surrounding plaza.

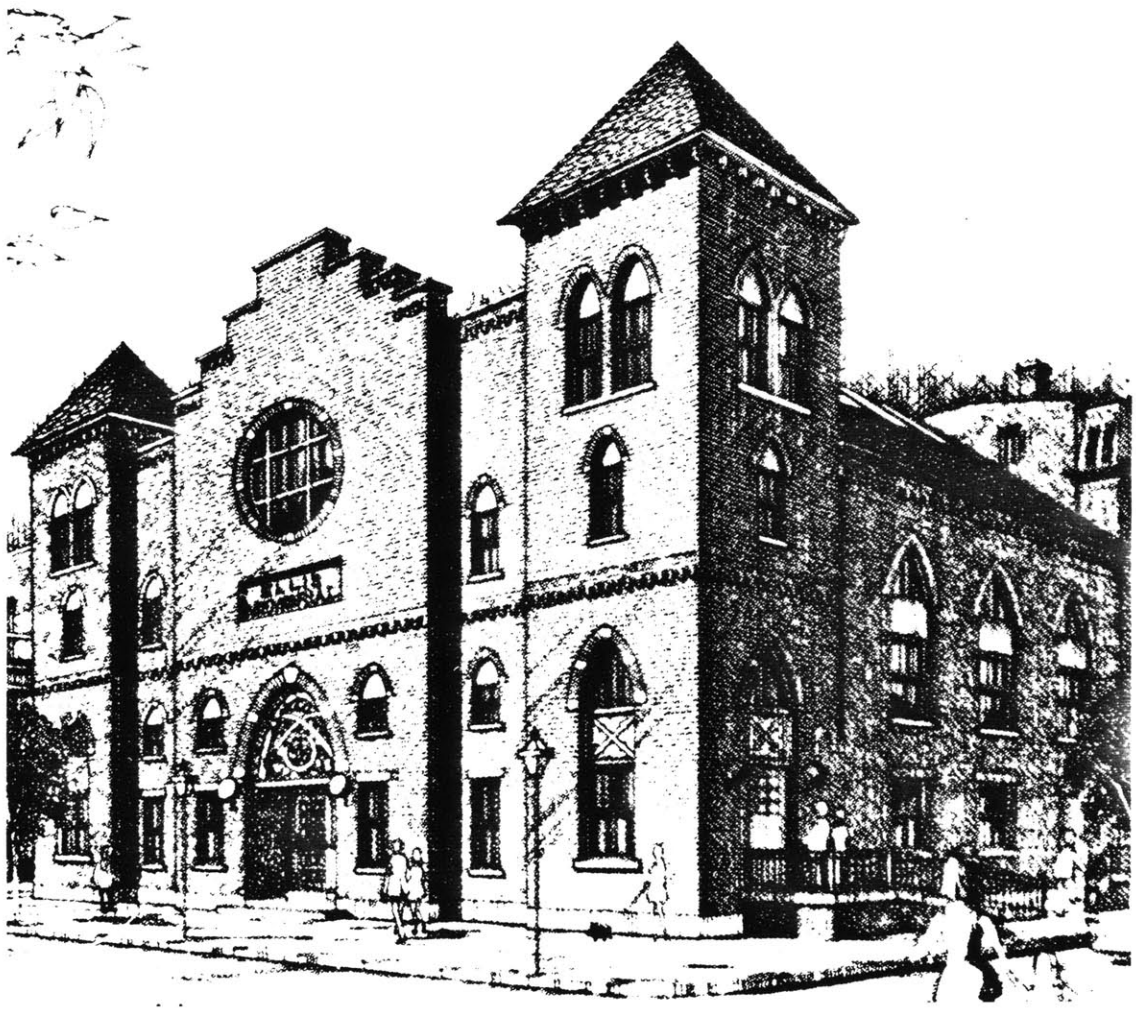
A third area necessary for code compliance was to allow access to all levels of the building to the handicapped. In order to meet this requirement, a ramp was dug to an entry in the side of the basement wall from which a hydraulic elevator

accessed a lower basement and the main auditorium floor. The elevator was installed in the former organ cabinet.

From this discussion of the three important areas of change that were necessary in a simple restoration of a church building to essentially the use for which it was designed, it can be seen that the decision concerning an appropriate use depends on formal analysis and community standards. Building structure and traditional use are not the determining factors .

The Ellis Center in the South End of Boston moved into its present building, a converted church, in 1924. Before they moved in, the building had been an automobile shop for thirteen years and then classroom space for the Franklin Institute. At sometime in the building's history a variety store had been attached to one corner of the building. In 1970, some of the expanding functions of the Center moved into two renovated townhouses next door and plans were begun for the phased renovation of the former church building. The construction work began in 1975 and was estimated to cost around $299,000, or about $26/s.f. There were probably two factors working together to make the actual figure come to more than $600,000 or about $55/s.f. When renovation costs become this high an argument for adaptive reuse of an existing building, as opposed to totally new construction, must depend solely on the intangible elements of a building such as the pleasure derived from rich detailing, the pleasant spaces that result from unprogrammed bits of "left over" built volume found here and there, the importance of the building in the streetscape or in the provision of a sense of temporal context.

The estimate of construction costs was based on the need for extensive structural reinforcement, brick reconstruction and repointing, a new asphalt shingle roof to replace the decaying slate one that was too heavy for the weakened structure, re-



placement of plaster with drywall throughout the building, demolition of the variety store appendage and numerous other small projects. Through a combination of altruism and reality, work was not put out for competitive bid. The Center wanted to give the job to a neighborhood contractor so that the renovation of the building, a labor intensive job, in addition to the programs of the center, would aid the community. This was not that extravagant a decision since contractors will rarely bid for a renovation job, anyway. The uncertainties as to the true extent of most rehabilitation jobs are too great for a contractor

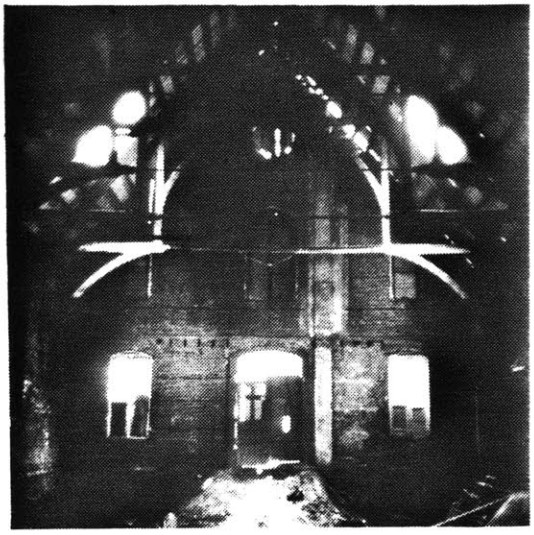
to be willing to risk a truly competitive bid.

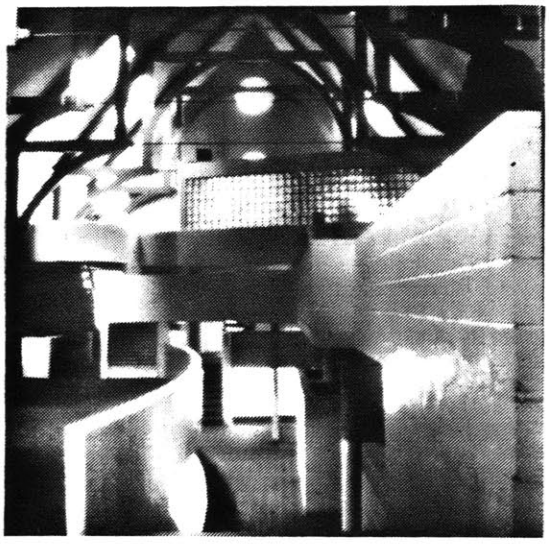
Since the administration of the Center was not experienced in the construction field, they were at the mercy of the architect and contractor in terms of what were justifiable cost overruns, true extras and unexpected problems. They had no way of knowing how much of the eventual doubling of the estimated construction costs was the inevitable result of the uncertainties involved in rehabilitation work and how much was the result of sloppy work by either the contractor or architect.

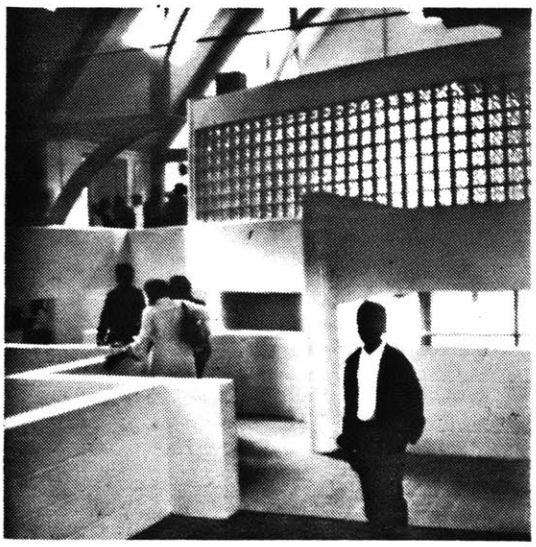
CHAPTER 8
PUTTING IT ALL TOGETHER

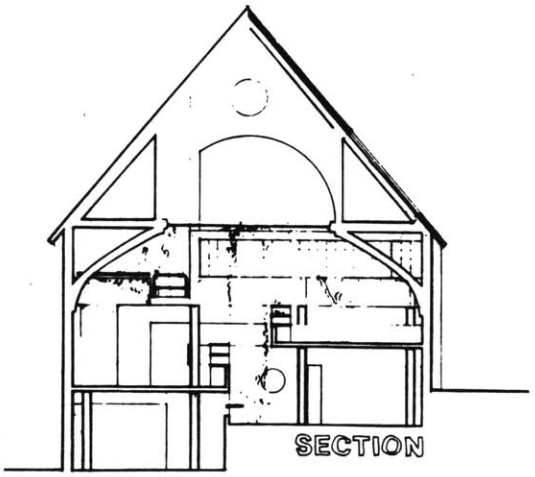
In the design of the Stuyvesant Hieghts Center architects William Vitto and Ira Oaklander had to deal with the nitty gritty as well as design a "pleasure zone." When the project of converting a medieval revival chapel to a community/youth education center was presented to them, they were faced with a fire bombed, gutted shell of a 40' x 90' Landmarks chapel in a Brooklyn neighborhood that was poor, yet had seen worse times and showed signs of grassroots revitalization. The project was part of the effort of the church congregation, which owned the building, to strengthen their youth ministry in order to insure the presence of the church in the community in years to come.

The shell to which the architects were asked to add learning spaces, play spaces and meeting spaces had been the original building, built in 1870, for the church. A larger church building had soon been built next door and the 1870 structure became an auxiliary chapel. The two buildings work together as a harmonious whole in the streetscape. The architects were asked to design the new spaces in such a way that they would communicate with the three levels of the main building next door and complement the range of sizes available in the basement-with-kitchen, and sanctuary floor-








SECTION

with-balcony of the current church building, as well.

The congregation had already dealt with another architect and had rejected a plan that called for removal of the fire charred trusses and burned-out planking of the pitched roof, replacing the roof with a new flat one and inserting a new two story building behind the historic facade. The proposed building had been designed with a central double loaded corridor on each floor. This was not the way to attract youth to the church or to convince school children to come there to have a good time after school. Like the designers of the Phoenix disco, the University of Delaware student center, or Little John's restaurant, Vitto and Oaklander were called upon to design a place for escape. Unlike the disco they did not suggest pleasure by alluding to escape to far away places. Unlike the designers of the University of Delaware student center or Little John's restaurant they didn't suggest a romanticized version of the past as a place for escape. With great vigor they suggested the present as a wonderful time to be in Bedford Stuyvesant, in Brooklyn, in New York City.

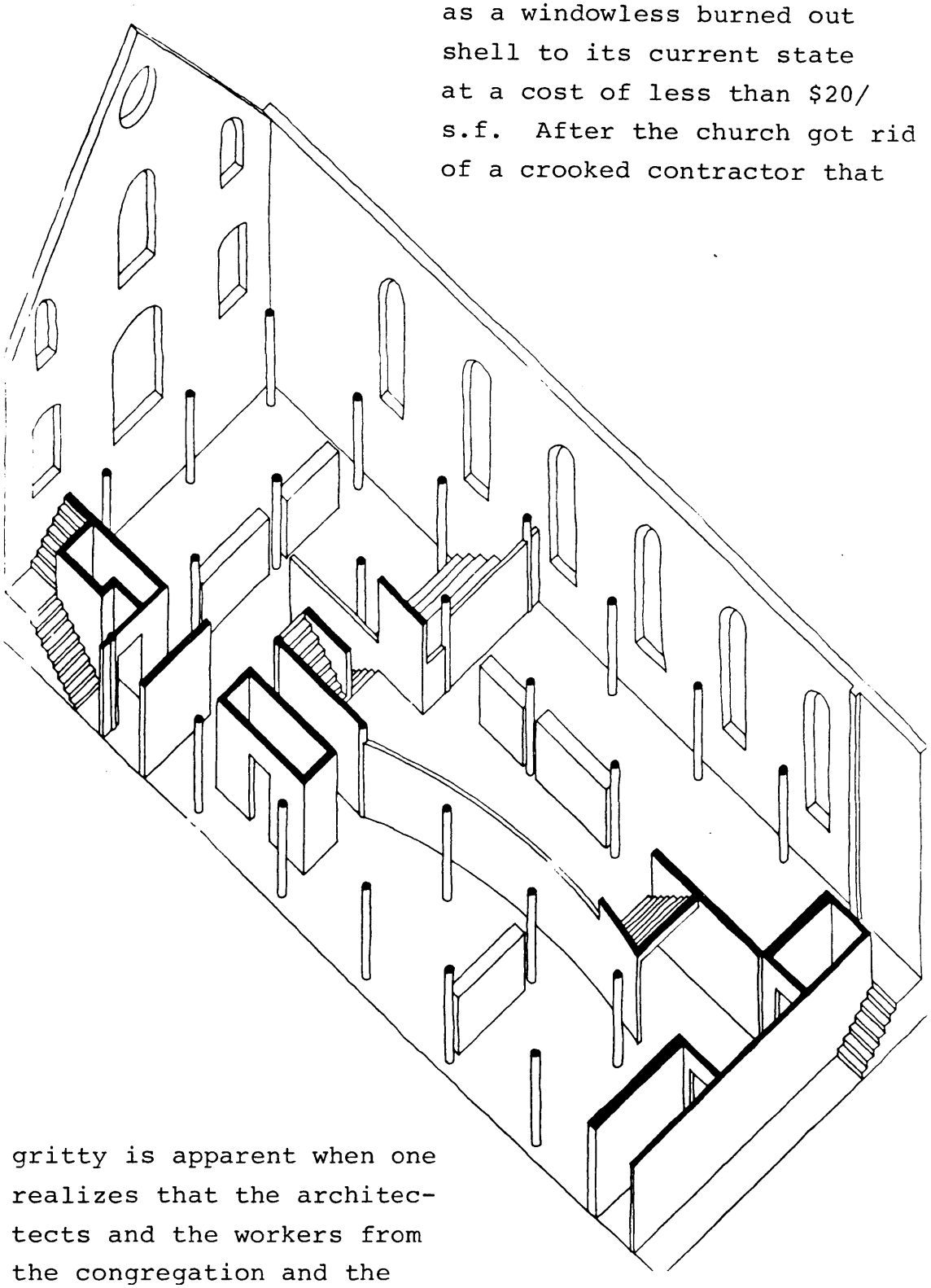
The place that the architects have created expresses the importance of the past to the form and substance of the present. The fire-charred trusses have been painstakingly re-covered with plywood pieces cut to box the trusses and yet preserve their original shape. The plywood surfaces were then painted a warm gray so that there is no mistaking them as imitation anything. Except for the church office at the entryway, there are no fully enclosed spaces. This allows both a central axial sense of movement from the entry towards the former location of the altar and a decision of returning from the altar by circling back down either what would traditionally have been a north or south side aisle, now at two different levels. Once having returned via an "aisle" to the entry area one

climbs to a space with the most enclosure that is used as an intimate chapel and meeting room and is in the location of the former balcony. Thus the sense of the former place is reinforced by the organization of the paths, by the preservation of a sense of the whole space as one moves through the levels, and by the interior massing. On the way to the balcony chapel, one reaches a semicircular landing that commands a view of almost all the main spaces of the place. It is in the mirror image location of a traditional raised side pulpit. When the whole place is being used by a church gathering it is from this semicircular landing that the minister addresses the group.

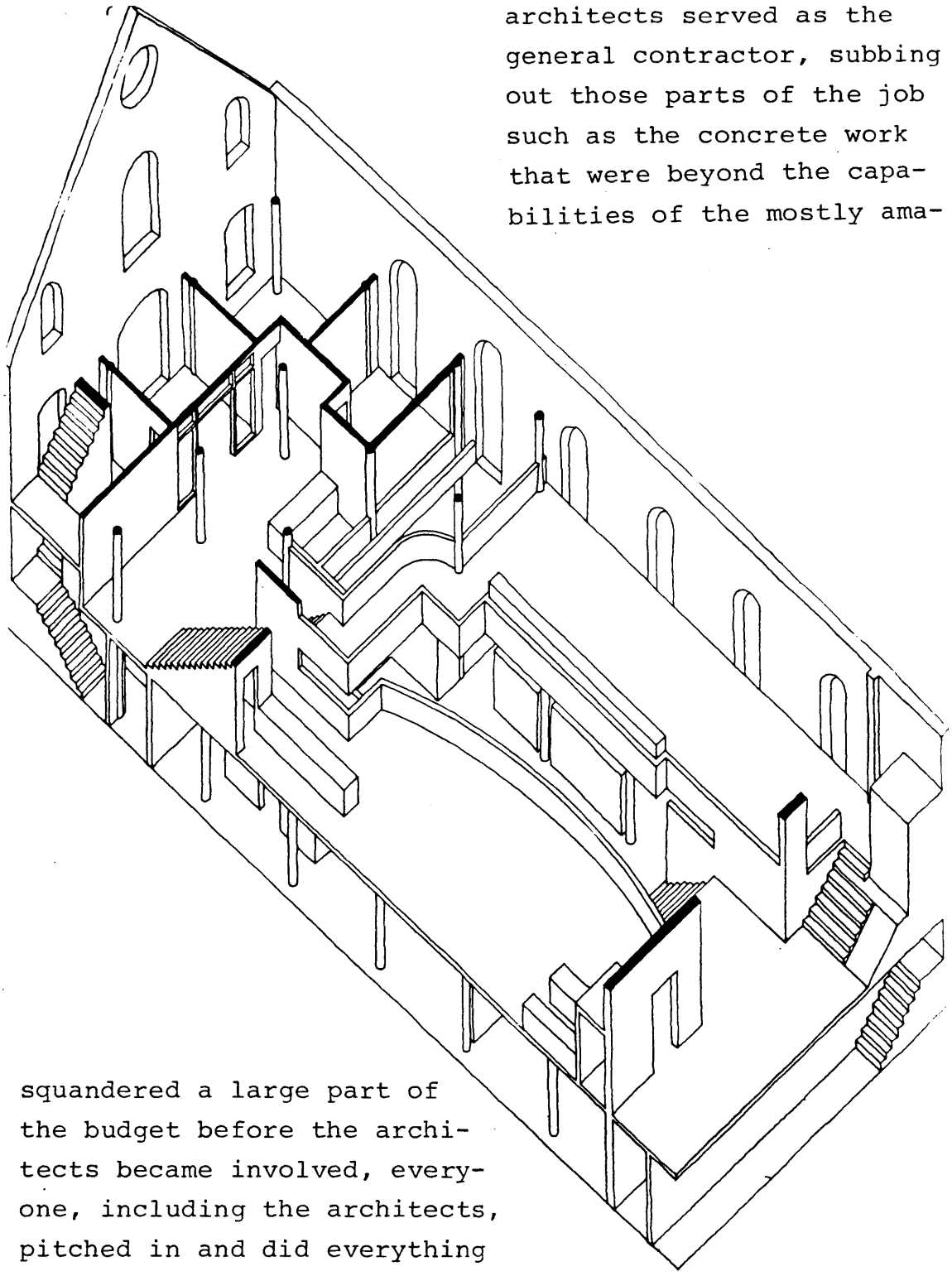
The choice of materials, light colors and forms have made it clear that the new structure is something brilliantly new and different. Yet, the creative use of traditional massing and movement patterns have made the new and old enrich each other through juxtaposition rather than compete with each other through collision. The exciting differentness of the place enhances the important role of the church building in the urban environment as a source of a pleasant change from daily spatial experience. Using Venturi's definition, this church building conversion meets three of the four characteristics of a "pleasure zone." It does so by being bright and filled with light, and by being an oasis of exciting spatial experience. It does more than just envelop the visitor in a new role. It tells the visitor that he is wonderful as he is. It does this in the same way that neighborhood revitalization through adaptive reuse and rehabilitation rather than demolition is effective in bringing pride into the community. The conversion did not make the building into an image of something it's not. Instead, it tells the user that what was there is good. Not only was the building worth saving; it was worth this much effort to make it even better.

The extent of the nitty

as a windowless burned out shell to its current state at a cost of less than $20/ s.f. After the church got rid of a crooked contractor that

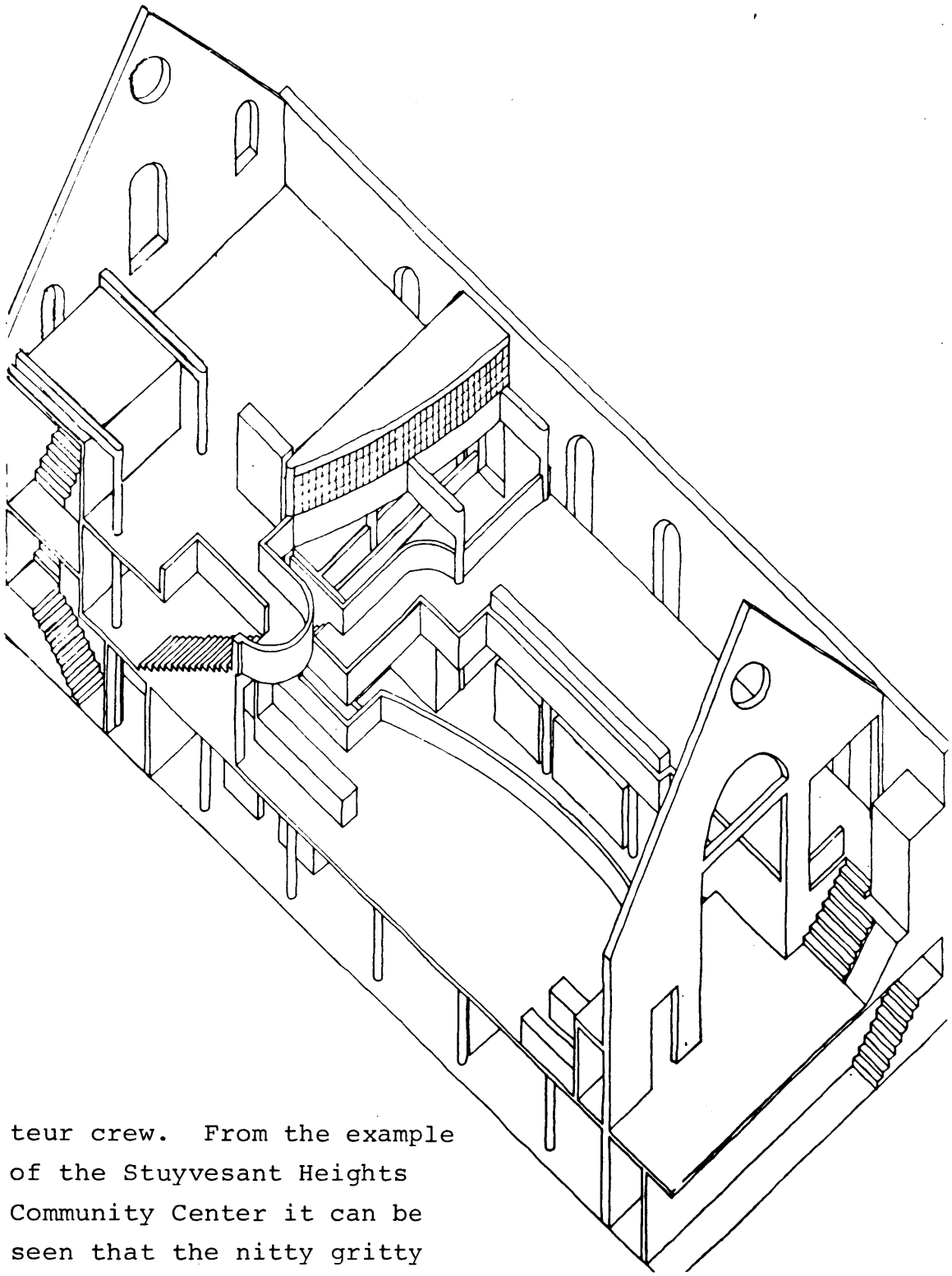


gritty is apparent when one realizes that the architec-tects and the workers from the congregation and the community were able to revive the building from its state



architects served as the general contractor, subbing out those parts of the job such as the concrete work that were beyond the capabilities of the mostly ama-

squandered a large part of the budget before the architects became involved, everyone, including the architects, pitched in and did everything from hand excavating a large section of the basement to laying glass block. The

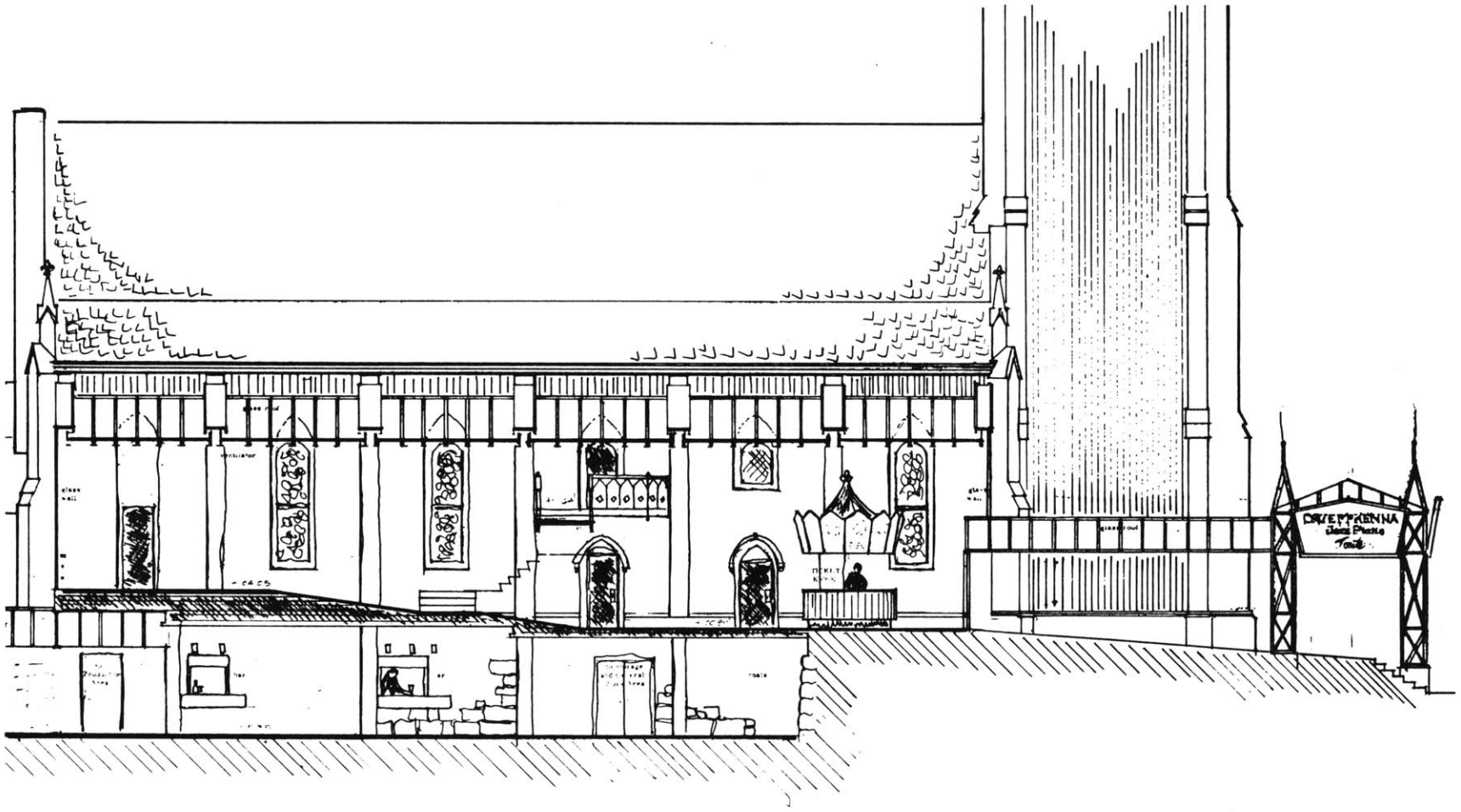


teur crew. From the example of the Stuyvesant Heights Community Center it can be seen that the nitty gritty need not get in the way of good design.

This discussion can be concluded with a second example of a church conversion in which the architects have dealt quite successfully with most of the numerous factors involved in converting a church to a new use. The former church is now the Performing Arts Center at Bath. It is a wooden Medieval Revival board and batten building. The main worship space measures about 48'x 96'. Although it has almost the same dimensions as the Stuyvesant Heights Community Center, it is different in spatial feeling. Along each side of the nave, separated by piers and an arcade, and defined by balconies above and by a change in roof pitch, are two aisles. The width of the aisles makes the nave very narrow, and the feeling of the space very vertical and axial. Such a narrow nave, only about 30' wide, makes conversion of the long space to a theater for live performances somewhat difficult.

The architects have added tiered seating to the space and have enlarged the stage so that it projects twenty feet into the nave. By placing the seats in a fan-like arrangement, a few seats could be added to the original aisles increasing the effective width of the theater. The proportions of the seating plan thus become more manageable as a theater.

The nave is so longitudinal and focussed in feeling that the addition of the fan-like tiers of seating becomes an overlayed geometry rather than an obliterating one. The piers and arcades, emphasized by the galleries above the aisles, still march powerfully towards the traditional east end of the former church building. As an added geometry that reflects a use pattern common to both the former and present use of the building the fan-like arrangement of the seating is compatible with the space.



A PROPOSED RENOVATION of the PERFORMING ARTS CENTER at BATH ☐
A FEASIBILITY STUDY FUNDED with a GRANT from the NATIONAL ENDOWME
DESIGNED by MERRYMEETING ARCHITECTS ☐ BRUNSWICK ☐ MAINE ☐

W–E SECTION thru FOYER

The modification of the space through the rising tiers of seats are sensitive image modifiers. They help make the building read as a former church that is now just as effectively something else.

The architects of the conversion have increased the number of seats convenient to the stage by enlarging the rear balcony. The side galleries have been subdivided, at a diagonal to the original structure, into theater boxes. In order to preserve a full sense of the height of the space, yet improve its functioning as a theater, clear plexiglass curved acoustic reflectors have been hung over the stage area as have flying light bridges. The former central entry tower has three levels and serves as a control room for lights and sound, as a set design studio and a fire exit.

The main entry for the theater has been shifted to the southside, crossing the long axis. Also on the south side is the former social hall/education building for the church. The conversion has added a new structure connecting these two buildings at three levels. The main area of this link serves as a foyer and lobby. It is a two story space, predominantly glass enclosed in which one finds a wide ramp accessing all the levels of the tiers, a round ticket kiosk and a bridge from the upper level of the former education building to the balconies of the theater. In order to provide enough entries and exits, three of the stained glass windows were removed and the openings converted to doorways. One of the windows has been remounted in a corresponding location in the glass wall of the lobby.

The former education building is also medieval in styling but is a later structure and not as rich in form or

craftsmanship. In the conversion, it has been extensively remodeled into a multi-level art gallery, lounge, restrooms, bar, and cabaret. Much of the north wall, adjoining the new foyer structure, has been removed and can be closed by operable partitions.

Extending from the new foyer between the former education building and church building is a long glass roofed walkway that extends all the way to the street and a large marquee. Without defacing the building by hanging a sign from it, or removing the tower and much of the character and landmark quality of the building, the architects have created a modern, horizontal equivalent to the medieval tower. It signals the location of the new main entry, serves as a local landmark and makes clear the juxtaposition of old and new.

The conversion architect and the director of the Performing Arts Center at Bath are frustrated by the nitty gritty. The conversion just described exists in drawings only. As a non-profit organization, they must patiently collect funding from numerous private and public sources before the construction can continue according to plan. In its current state, the theater uses the old pews for seating, the lighting control room in the tower is accessed by a ladder and the side galleries cannot be used for seating because they don't have enough exits.

The first step in the conversion was a masterful one, however. Few people have heard of the Performing Arts Center at Bath; but, many southern coastal Maine residents have heard of the Chocolate Church. The Performing Arts Center stands on a hillside, on the main street of an old New England Town and is brown. The building had been white when it was acquired by the Performing Arts Center, and it had been white for as long as anyone could remember. When it was listed on the National Register,

the local preservation society examined it and discovered that its original color had been brown. With one paint job, necessary to physically preserve the building, the former church was given a very powerful new image and was made historically "correct."

The case studies discussed in this investigation are all examples of attempts, with varying degrees of success, to sympathetically convert the building to another use. Church conversions have not always been the result of a design or nostalgic sensibility, however. Ever since minarets were added to Hagia Sophia in order to convert it to a mosque, church conversions have often come about as a result of political or social upheavals. The space of church buildings, which has always been designed to proclaim a message or strong image, has often been altered or reused to proclaim an equally powerful yet contrary message.

Henry VIII used the conversion and destruction of church buildings and property as a way to proclaim his newly won independence from Rome and his new position as the head of the Anglican church. While most parish churches were converted through the arrangement of furnishings to the new requirements of worship, large monastic structures and other significant church buildings were converted into ruins, granaries and arsenals. The later Puritan Civil War resulted in further symbolic conversion of ornate Anglican cathedrals to simple Puritan houses of worship. Stained glass windows were systematically smashed and heads knocked off of statues of saints.

In France, the Revolution of 1789 resulted in the conversion of churches to barracks, prisons, warehouses, market halls, china factories, and stables. In Russia, the advent of the Soviet Socialist Republic saw the conversion of churches to anti-religion museums. In the United States, the predominantly Protestant

tradition, which tends to regard the building more as a meeting house and less as a holy place, and the theoretical separation of church and state, makes church buildings somewhat less symbolic of power. Their conversion to another use is thus rarely a result of symbolic malicious intent. Thus, inappropriate uses for a church building can be determined by the intent or motivation of the converter and must be established by a dialogue within the community involved.

Thus far, this discussion has taken primarily a positive approach to the question of how and why to reuse an abandoned church building. The discussion has centered on how a church conversion should be done. In conclusion, the issues discussed in the previous sections can be put into relief by briefly discussing what not to do in a church conversion.

The answer to the question of what not to do with an abandoned church can be answered, in fact, very briefly: don't tear it down. In most urban environments it is either one of the last remnants of low rise building, an important break in sweeping strings of row houses, or one of the few remaining examples of proud craftsmanship and rich ornamentation. What to do with it once it has been saved? Don't worship or imitate it. It should be converted to a new use with the same vigor yet the same level of care that was exhibited in its original design or construction. The original building was built with a careful blend of current fashion, comprehension of tradition, modification according to use requirements, and, awareness of image and the urban context. The conversion should be designed with an equally sensitive blend.

FOOTNOTES

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